

Rec'd PCT/PTO 31 MAY 2005

SEQUENCE LISTING

<110> Qing Zhu
Ju-Tao Guo
Christoph Seeger

<120> Replication of Hepatitis C Virus in
Non-Hepatic Epithelial and Mouse Hepatic Cells

<130> 0149 PO3068

<140> Not Yet Assigned

<141> 2003-12-12

<150> 60/433,303

<151> 2002-12-13

<160> 16

<170> FastSEQ for Windows Version 3.0

<210> 1

<211> 11313

<212> DNA

<213> Artificial Sequence

<220>

<223> Plasmid

<400> 1

gccagccccc	gattgggggc	gacactccac	catagatcac	tcccctgtga	ggaactactg	60
tcttcacgca	gaaagcgtct	agccatggcg	ttagtatgag	tgctcgtgcag	cctccaggac	120
ccccctccc	gggagagcca	tagtggtctg	cggaaccggt	gagtacaccg	gaattgccag	180
gacgaccggg	tcctttcttg	gatcaaccgg	ctcaatgcct	ggagatttgg	gcgtgcccc	240
gcgagactgc	tagccgagta	gtgttgggtc	gcgaaaggcc	ttgtggtact	gcctgatagg	300
gtgcttgcca	gtgccccggg	aggtctcgta	gaccgtgcac	catgagcacg	aatcctaaac	360
ctcaaagaaa	aaccaaaggg	cgcgccatga	ttgaacaaga	tggattgcac	gcaggttctc	420
cggccgcttg	ggtggagagg	ctattcggct	atgactgggc	acaacagaca	atcggctgct	480
ctgatgccgc	cgtgttccgg	ctgtcagcgc	aggggcgccc	ggttcttttt	gtcaagaccg	540
acctgtccgg	tgccctgaat	gaactgcagg	acgaggcagc	gcggctatcg	tggctggcca	600
cgacgggctg	tccttgccga	gctgtgctcg	acgttgtcac	tgaagcggga	agggactggc	660
tgctattggg	cgaagtgccg	gggcaggatc	tcctgtcatc	tcaccttgct	cctgccgaga	720
aagtatccat	catggctgat	gcaatgcggc	ggctgcatac	gcttgatccg	gctacctgcc	780
cattcgacca	ccaagcgaaa	catcgcatcg	agcagacacg	tactcggatg	gaagccggtc	840
ttgtcgatca	ggatgatctg	gacgaagagc	atcaggggct	cgcgcagacc	gaactgttcg	900
ccaggctcaa	ggcgcgcgatg	cccgcggcgc	aggatctcgt	cgtgacccat	ggcgatgcct	960
gcttgccgaa	tatcatgggtg	gaaaatggcc	gcttttcttg	attcatcgac	tgtggccggc	1020
tgggtgtggc	ggaccgctat	caggacatag	cgttggttac	ccgtgatatt	gctgaagagc	1080
ttggcggcga	atgggctgac	cgttcctcgc	tgctttacgg	tatcgccgct	cccgatccgc	1140
agcgcacgcg	cttctatcgc	cttcttgacg	agttcttctg	agtttaaaca	gaccacaacg	1200
gtttccctct	agcgggatca	attccgcccc	tctccctccc	ccccccctaa	cgttactggc	1260
cgaagccgct	tggaataagg	ccggtgtgcg	tttgtctata	tgttattttc	caccatattg	1320
ccgtcttttg	gcaatgtgag	ggcccggaaa	cctggccctg	tcttcttgac	gagcattcct	1380
aggggtcttt	cccctctcgc	caaaggaatg	caaggtctgt	tgaatgtcgt	gaaggaagca	1440
gttctctctg	aagcttcttg	aagacaaaac	acgtctgtag	cgaccctttg	caggcagcgg	1500
aacccccac	ctggcgacag	gtgcctctgc	ggccaaaagc	cacgtgtata	agatacacct	1560
gcaaaggcgg	cacaacccca	gtgccacgtt	gtgagttgga	tagttgtgga	aagagtcaaa	1620
tggctctcct	caagcgtatt	caacaagggg	ctgaaggatg	cccagaagg	acccatttgt	1680
atgggatctg	atctggggcc	tcggtgcaca	tgctttacat	gtgttttagtc	gagggttaaaa	1740
aacgtctagg	ccccccgaac	cacggggacg	tggttttcct	ttgaaaaaca	cgataatacc	1800
atggcgccca	ttacggccta	ctcccaacag	acgcgagggc	tacttggtctg	catcataact	1860
agcctcacag	gccgggacag	gaaccaggtc	gagggggagg	tccaagtggg	ctccaccgca	1920
acacaatctt	tcctggcgac	ctgcgtcaat	ggcgtgtgtt	ggactgtcta	tcatggtgcc	1980
ggctcaaaga	cccttgccgg	cccaaagggc	ccaatcaccc	aaatgtacac	caatgtggac	2040

caggacctcg	tgggtggca	agcgccccc	ggggcgcggt	ccttgacacc	atgcacctgc	2100
ggcagctcgg	acctttactt	ggtcacgagg	catgccgatg	tcattccggg	gcgcccggcg	2160
ggcgacagca	gggggagcct	actctccccc	aggcccgtct	cctacttgaa	gggctcttcg	2220
ggcgggtccac	tgctctgccc	ctcggggcac	gctgtgggca	tctttcgggc	tgccgtgtgc	2280
acccgagggc	ttgcgaagc	ggtgacttt	gtaccgctcg	agtctatgga	aaccactatg	2340
cgggtccccg	tcttcacgga	caactcgtcc	cctccggccg	taccgcagac	attccagggtg	2400
gccccatctac	acgcccctac	tggtagcggc	aagagcacta	aggtgccggc	tgctatgca	2460
gccccagggt	ataagggtgct	tgtcctgaac	ccgtccgtcg	ccgccaccct	aggtttcggg	2520
gcgtatatgt	ctaaggcaca	tggtatcgac	cctaaccatca	gaaccggggg	aaggaccatc	2580
accacgggtg	cccccatcac	gtactccacc	tatggcaagt	ttcttgccga	cgggtggttgc	2640
tctggggggc	ccatgacat	cataatatgt	gatgagtggc	actcaactga	ctcgaccact	2700
atcctggggc	tgggcacagt	cctggaccaa	gcggagacgg	ctggagcgcg	actcgtcgtg	2760
ctcgccaccg	ctacgcctcc	gggatcggtc	accgtgccac	atccaaacat	cgaggagggtg	2820
gctctgtcca	gcactggaga	aatccccctt	tatggcaaag	ccatccccat	cgagaccatc	2880
aaggggggga	ggcacctcat	tttctgccat	tccaagaaga	aatgtgatga	gctcgccgcg	2940
aagctgtccg	gcctcggact	caatgctgta	gcatattacc	ggggccttga	tgtatccgtc	3000
ataccaacta	gcggagacgt	cattgtcgta	gcaacggacg	ctctaatagac	gggctttacc	3060
ggcgatttctg	cctcagtgat	cgactgcaat	acatgtgtca	cccagacagt	cgcacttcagc	3120
ctggacccga	ccttcaccat	tgagacgacg	accgtgccac	aagacgcggg	gtcacgctcg	3180
cagcggcgag	gcaggactgg	taggggcagg	atgggcattt	acaggtttgt	gactccagga	3240
gaacggccct	cgggcagtgt	cgattccctcg	gttctgtgcg	agtgtatga	cgccggcgtgt	3300
gcttggttacg	agctcacgcc	cgccgagacc	tcagttagggt	tgccggctta	cctaaacaca	3360
ccagggttgc	ccgtctgcca	ggaccatctg	gagttctggg	agagcgtctt	tacaggcttc	3420
accacatag	acgcccattt	cttgtcccg	actaagcagg	caggagacaa	cttccctac	3480
ctggtagcat	accaggctac	ggtgtgcgcc	agggctcagg	ctccacctcc	atcgtgggac	3540
caaagtgtga	agtgtctcat	acggctaaag	cctacgctgc	acgggccaac	gcccctgctg	3600
tataggctgg	gagccgttca	aaacgagggt	actaccacac	accccataac	caaatacatc	3660
atggcatgca	tgtcggctga	cctggaggtc	gtcacgagca	cctgggtgct	ggtaggcgga	3720
gtcctagcag	ctctggccgc	gtattgcctg	acaacaggca	gcgtggtcac	tgtggcgagg	3780
atcatcttgt	ccggaaagcc	ggccatcatt	cccagacagg	aagtccttta	ccgggagttc	3840
gatgagatgg	aagagtgcgc	ctcacacctc	ccttacatcg	aacagggaat	gcagctcgcc	3900
gaacaattca	aacagaaggc	aatcgggttg	ctgcaaacag	ccaccaagca	agcggagggt	3960
gctgctcccg	tggtggaatc	caagtggcgg	accctcgaag	ccttctgggc	gaagcatatg	4020
tgggaatttc	tcagcgggat	acaatattta	gcaggcttgt	ccactctgcc	tggcaacccc	4080
gcgatagcat	cctgatggc	attcacagcc	tctatacca	gcccgctcac	cacccaacat	4140
accctcctgt	ttaacatcct	gggggggatgg	gtggccgccc	aacttgctcc	tcccagcgct	4200
gcttctgctt	tcgtaggcgc	cggcatcgct	ggagcggctg	ttggcagcat	aggccttggg	4260
aaggtgcttg	tggatatttt	ggcaggttat	ggagcagggg	tggcagggcg	gctcgtggcc	4320
tttaagggtca	tgagcggcga	gatgccctcc	accgaggacc	tggttaacct	actccctgct	4380
atcctctccc	ctggcgccct	agtcgtcggg	ctcgtgtgcg	cagcgatact	gcgtcggcac	4440
gtgggcccag	gggagggggc	tgtgcagttg	atgaaccggc	tgatagcggt	cgcttcggcg	4500
ggtaaccacg	tctcccccac	gcactatgtg	cctgagagcg	acgctgcagc	acgtgtcact	4560
cagatcctct	ctagtcttac	catcactcag	ctgctgaaga	ggcttcacca	gtggatcaac	4620
gaggactgct	ccacgccatg	ctccggctcg	tggctaagag	atgtttggga	ttggatatgc	4680
acgggtgtga	ctgatttcaa	gacctggctc	cagtcctaagc	tcttgccgcg	attgccggga	4740
gtcccccttc	tctcatgtca	acgtgggtac	aaggagctct	ggcggggcga	cggcatgatg	4800
caaaccacct	gcccattgtg	agcacagatc	accggacatg	tgaaaaacgg	ttccatcgag	4860
atcgtggggc	ctaggacctg	tagtaaacag	tggcatggaa	cattccccat	taacgcgtac	4920
accacggggc	cctgcacgcc	ctccccggcg	ccaaattatt	ctagggcgct	gtggcgggtg	4980
gctgctgagg	agtacgtgga	ggttacgcgg	gtgggggatt	tccactacgt	gacgggcatg	5040
accactgaca	acgtaaagtg	cccgtgtcag	gttccggccc	ccgaattctt	cacagaagtg	5100
gatgggggtg	ggttgccacag	gtacgctcca	gcgtgcaaac	ccctcctacg	ggaggaggtc	5160
acattcctgg	tcgggctcaa	tcaatacctg	ggtgggtcac	agctcccatg	cgagcccga	5220
ccggacgtag	cagtgtctac	ttccatgctc	accgaccctt	cccacattac	ggcggagacg	5280
gctaagcgta	ggctggccag	gggatctccc	ccctccttgg	ccagctcatc	agctagccag	5340
ctgtctgcgc	cttccctgaa	ggcaacatgc	actaccgctc	atgactcccc	ggacgctgac	5400
ctcatcgagg	ccaacctcct	gtggcggcag	gagatggggc	ggaacatcac	ccgcgtggag	5460
tcagaaaata	aggtagtaat	tttggactct	ttcgagccgc	tccaagcgga	ccaggatgag	5520
agggaagtat	ccgttccggc	ggagatcctg	cggagggtcca	ggaaattccc	tcgagcgatg	5580
cccatatggg	cacgcccggg	ttacaacctt	ccactgttag	agtcctggaa	ggaccoggac	5640
tacgtccctc	cagtgggtaca	cgggtgtcca	ttgccgcctg	ccaaggcccc	tccgatacca	5700
cctccacgga	ggaagaggac	ggttgtcctg	tcagaatcta	ccgtgtcttc	tgcttggcgc	5760
gagctcgcca	caaagacctt	cggcagctcc	gaatcgtcgg	ccgtcgacag	cggcacggca	5820
acggcctctc	ctgaccagcc	ctccgacgac	ggcgacggcg	gatccgacgt	tgagtcgtac	5880
tctcccatgc	cccccttga	gggggagccg	ggggatcccg	atctcagcga	cgggtcttgg	5940
tctaccgtaa	gcgaggaggc	tagtgaggac	gtcgtctgct	gctcgatgtc	ctacacatgg	6000

acaggcgccc	tgatcacgcc	atgcgctgcg	gaggaaacca	agctgcccac	caatgcactg	6060
agcaactcct	tgctccgtca	ccacaacttg	gtctatgcta	caacatctcg	cagcgcaagc	6120
ctgcggcaga	agaaggctac	ctttgacaga	ctgcaggctc	tggacgacca	ctaccgggac	6180
gtgctcaagg	agatgaaggc	gaaggcgctc	acagttaagg	ctaaacttct	atccgtggag	6240
gaagcctgta	agctgacgcc	ccccattcgc	gccagatcta	aatttgggta	tggggcaaac	6300
gacgtccgga	acctatccag	caaggcgctt	aaccacatcc	gctccgtgtg	gaaggacttg	6360
ctggaagaca	ctgagacacc	aattgacacc	accatcatgg	caaaaaatga	ggttttctgc	6420
gtccaaccag	agaagggggg	cgcgaagcca	gctcgcccta	tcgtattccc	agatttgggg	6480
gttcgtgtgt	gcgagaaaat	ggccctttac	gatgtggtct	ccaccctccc	tcaggccgtg	6540
atgggctcct	catacggatt	ccaatactct	cctggacagc	gggtcgagtt	cctgggtgaat	6600
gcctggaaaag	cgaagaaatg	ccctatgggc	ttcgcatatg	acaccgctg	ttttgactca	6660
acggctcactg	agaatgacat	ccgtgttgag	gagtcaatct	accaatgttg	tgacttggcc	6720
cccgaagcca	gacaggccat	aaggctcgct	acagagcgcc	tttacctcgg	gggccccctg	6780
actaattcta	aagggcagaa	ctgcggctat	cgccggtgcc	gcgcgagcgg	tgtactgacg	6840
accagctgcg	gtaataccct	cacatgttac	ttgaaggccg	ctgcggcctg	tcgagctgcg	6900
aagctccagg	actgcacgat	gctcgtatgc	ggagacgacc	ttgtcgttat	ctgtgaaagc	6960
gcggggaccc	aagaggacga	ggcgagccta	cgggccttca	cggaggctat	gactagatac	7020
tctgcccccc	ctggggaccc	gccccaaacca	gaatacgact	tggagttgat	aacatcatgc	7080
tcctccaatg	tgctcagtcg	gcacgatgca	tctggcaaaa	gggtgtacta	tctcaccctg	7140
gacccaccca	cccccttgc	gcgggctgcg	tgggagacag	ctagacacac	tccagtcaat	7200
tcctggctag	gcaacatcat	catgtatgcg	cccaccttgt	gggcaaggat	gactcctgatg	7260
actcatttct	tctccatcct	tctagctcag	gaacaacttg	aaaaagccct	agattgtcag	7320
atctacgggg	cctgttactc	cattgagcca	cttgacctac	ctcagatcat	tcaacgactc	7380
catggcctta	gcgcattttc	actccatagt	tactctccag	gtgagatcaa	taggggtggct	7440
tcatgcctca	ggaaacttgg	ggtaccgccc	ttcgagctct	ggagacatcg	ggccagaagt	7500
gtccgcgcta	ggctactgtc	ccaggggggg	agggctgcca	cttgtggcaa	gtacctcttc	7560
aactgggcag	taaggaccaa	gctcaaactc	actccaatcc	cggctgcgtc	ccagttggat	7620
ttatccagct	ggttcgttgc	tggttacagc	gggggagaca	tatatcacag	cctgtctcgt	7680
gcccgacccc	gctggttcat	gtggtgccta	ctcctacttt	ctgtaggggt	aggcatctat	7740
ctactcccca	accgatgaac	ggggaccta	acactccagg	ccaataggcc	atcctgtttt	7800
tttccctttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	ttctcctttt	7860
tttttctctt	ttttttcctt	ttctttcctt	tgggtggctcc	atcttagccc	tagtcacggc	7920
tagctgtgaa	aggtccgtga	gcccgttgac	tgcagagagt	gctgatactg	gcctctctgc	7980
agatcaagta	ctcctgcagg	cgcgccacta	gtgggaatac	gcgggggtatg	ccgcgtttta	8040
gcatattgac	gacccaattc	tcatgtttga	cagcttatca	tcgataagct	ttaatgcggt	8100
agtttatcac	agttaaattg	ctaacgcagt	caggcaacctg	gtatgaaatc	taacaatgcg	8160
ctcatcgta	tgctcggcac	cgtaaccctg	gagctgtgat	gcataggctt	ggttatgccg	8220
gtactgccgg	gcctcttgcg	ggatatcgct	cattccgaca	gcategccag	tcactatggc	8280
gtgctgctag	cgctatatgc	gttgatgcaa	tttctatgcg	caccggttct	cggagcactg	8340
tcgcaccgct	ttggccgccc	cccagtcctg	ctcgcttcgc	tacttggagc	cactatcgac	8400
tacgcgatca	tggcgaccac	acccgtcctg	tggatcctct	acgcgggacg	catcgtggcc	8460
ggcatcaccg	gcgccacagg	tgcggttgct	ggcgccctata	tcgccgacat	caccgagggg	8520
gaagatccgg	ctcgccactt	cgggctcatg	agcgcttggt	tcggcggtggg	tatgggtggca	8580
ggccccgtgg	ccgggggact	gttggggcgc	atctccttgc	atgcaccatt	ccttgcggcg	8640
gcggtgctca	acggcctcaa	cctactactg	ggctgcttcc	taatgcagga	gtcgcataag	8700
ggagagcgtc	gaccgatgcc	cttgagagcc	ttcaaccagg	tcagctcctt	ccggtggggcg	8760
cggggcatga	ctatcgtcgc	cgcacttatg	actgtcttct	ttatcatgca	actcgttagga	8820
cagggtccgg	cagcgctctg	ggtcattttc	ggcgaggacc	gctttcgctg	gagcgcgacg	8880
atgatcgccc	tgtcgcttgc	ggtattcgga	atcttgacag	ccctcgctca	agccttcgtc	8940
actgggtccc	ccaccaaacg	tttcggcgag	aagcaggcca	ttatcgccgg	catggcggcc	9000
gacgcgctgg	gctacgtctt	gctggcgctc	gcgacgcgag	gctggatggc	cttccccatt	9060
atgattcttc	tcgcttccgg	cggcatcggg	atgcccgcgt	tgcaggccat	gctgtccagg	9120
caggtagatg	acgacatca	gggacagctt	caaggatcgc	tcgcggctct	taccagccta	9180
acttcgatca	ctggaccgct	gactgtcacg	gcgatttatg	ccgcctcgcc	gagcacatgg	9240
aacgggttgg	catggattgt	aggcgccgccc	ctataccttg	tctgcctccc	cgcgttgctg	9300
cgcggtgcat	ggagccgggg	cacctcgacc	tgaatggaag	ccggcggcac	ctcgcataacg	9360
gattcaccac	tccaagaatt	ggagccaatc	aattcttgcg	gagaactgtg	aatgcgcaaa	9420
ccaacccttg	gcagaacata	tccatcgctg	ccgccatctc	cagcagccgc	acgcccgcga	9480
tctcgggacg	cgttgggttc	tggccacggg	tgcgatgat	cgtgctcctg	tcgttgagga	9540
cccggttagg	ctggcggggg	tgccttactg	gttagcagaa	tgaatcaccg	atacgcgagc	9600
gaacgtgaag	cgactgctgc	tgcaaaacgt	ctgcgacctg	agcaacaaca	tgaatggctc	9660
tcgggtttccg	tgtttcgtaa	agtctggaaa	cgcgggaagtc	agcgccttgc	accattatgt	9720
tccggatctg	catcgcagga	tgctgctggc	taccctgtgg	aacacctaca	tctgtattaa	9780
cgaagcgctg	gcattgacct	tgagtgaatt	ttctctgggt	ccgccgcac	cataccgcca	9840
gttggtttacc	ctcacaacgt	tccagtaacc	gggcgatgtc	atcatcagta	accgctatcg	9900
tgagcatcct	ctctcgtttc	atcggtatca	ttacccccat	gaacagaaat	tcccccttac	9960

acggaggcat	caagtgacca	aacaggaaaa	aaccgcccctt	aacatggccc	gctttatcag	10020
aagccagaca	ttaacgcttc	tggagaaact	caacgagctg	gacgcggatg	aacaggcaga	10080
catctgtgaa	tcgcttcacg	accacgctga	tgagctttac	cgcagctgcc	tcgcgcgttt	10140
cggatgatgac	ggtgaaaacc	tctgacacat	gcagctcccc	gagacgggtca	cagcttgtct	10200
gtaagcggat	gcccggagca	gacaaagccc	tcagggcgcg	tcagcgggtg	ttggcgggtg	10260
tcggggcgca	gccatgaccc	agtcacgtag	cgatagcgga	gtgtatactg	gcttaactat	10320
gcggcatcag	agcagattgt	actgagagt	caccatattg	ggtgtgaaat	accgcacaga	10380
tgcgtaagga	gaaaataccg	catcaggcgc	tcttcgcgtt	cctcgctcac	tgactcgctg	10440
cgctcggctg	ttcggctgcg	gcgagcggta	tcagctcact	caaaggcggt	aatacggtta	10500
tccacagaat	caggggataa	cgcaggaaag	aacatgtgag	caaaaggcca	gcaaaaggcc	10560
aggaaccgta	aaaaggccgc	ggtgctggcg	tttttccata	ggctccgccc	ccctgacgag	10620
catcacaaaa	atcgacgctc	aagtcaagag	tggcgaaacc	cgacaggact	ataaagatac	10680
caggcgtttc	cccctggaag	ctccctcggt	cgctctcctg	ttccgacct	gccgcttacc	10740
ggatacctgt	ccgcctttct	cccttcggga	agcgtggcgc	tttctcatag	ctcacgctgt	10800
aggtatctca	gttcgggtgta	ggtcgttcgc	tccaagctgg	gctgtgtgca	cgaaccccc	10860
gttcagcccg	accgctgcgc	cttatccggt	aactatcgct	ttgagtccaa	cccggtaaga	10920
cacgacttat	cgccactggc	agcagccact	ggtaacagga	ttagcagagc	gaggtatgta	10980
ggcgggtgcta	cagagttcct	gaagtgggtg	cctaactacg	gctacactag	aaggacagta	11040
tttgggtatct	gcgctctgct	gaagccagtt	accttcggaa	aaagagttgg	tagctcttga	11100
tccggcaaac	aaaccaccgc	tggtagcggg	gggtttttttg	tttgcaagca	gcagattacg	11160
cgcagaaaaa	aaggatctca	agaagatcct	ttgatctttt	ctacgggggtc	tgacgctcag	11220
tggaaacgaaa	actcacgtta	agggattttg	gtcatgagat	tatcaaaaag	gatcttcacc	11280
tagatccttt	tctagataat	acgactcact	ata			11313

<210> 2

<211> 11313

<212> DNA

<213> Artificial Sequence

<220>

<223> Plasmid

<400> 2

gccagccccc	gattggggggc	gacactccac	catagatcac	tcccctgtga	ggaactactg	60
tcttcaacga	gaaagcgtct	agccatggcg	ttagtatgag	tgctgtgcag	cctccaggac	120
ccccctccc	gggagagcca	tagtggtctg	cggaaaccgg	gagtacaccg	gaattgccag	180
gacgaccggg	tcctttcttg	gatcaaccgc	ctcaatgcct	ggagatttgg	gcgtgcccc	240
gcgagactgc	tagccgagta	gtgttgggtc	gcgaaaggcc	ttgtgggtact	gcctgatagg	300
gtgcttgcca	gtgcccggg	aggtctcgta	gaccgtgcac	catgagcacg	aatcctaacc	360
ctcaaaagaaa	aaccaaagg	cgcgccatga	ttgaacaaga	tggattgcac	gcaggttctc	420
cggccgcttg	ggtggagagg	ctattcggct	atgactgggc	acaacagaca	atcggctgct	480
ctgatgccgc	cgtgttcggg	ctgtcagcgc	aggggcgccc	ggttcttttt	gtcaagaccg	540
acctgtccgg	tgccctgaat	gaactgcagg	acgaggcagc	gcggctatcg	tggctggcca	600
cgacgggcgt	tccttgcgca	gctgtgctcg	acgttgtcac	tgaagcggga	aggactggc	660
tgctattggg	cgaagtgcgg	gggcaggatc	tcctgtcatc	tcaccttgct	cctgccgaga	720
aagtatccat	catggctgat	gcaatgcggc	ggctgcatac	gcttgatccg	gctacctgcc	780
cattcgacca	ccaagcgaaa	catcgcatcg	agcgagcacg	tactcggatg	gaagccggct	840
ttgtcgatca	ggatgatctg	gacgaagagc	atcaggggct	cgcgccagcc	gaactgttcg	900
ccaggctcaa	ggcgcgcgat	cccgcggcg	aggatctcgt	cgtgaccat	ggcgatgcct	960
gcttgccgaa	tatcatggtg	gaaaatggcc	gcttttctg	attcatcgac	tgtggccggc	1020
tgggtgtggc	ggaccgctat	caggacatag	cgcttggtac	ccgtgatatt	gctgaagagc	1080
ttggcggcga	atgggctgac	cgcttctctg	tgttttacgg	tatcgccgct	cccgatccgc	1140
agcgcatcgc	cttctatcgc	cttcttgacg	agttcttctg	agtttaaaca	gaccacaacg	1200
gtttccctct	agcgggatca	attccgcccc	tctccctccc	ccccccctaa	cgttactggc	1260
cgaagccgct	tggaaataagg	ccggtgtgcg	tttgtctata	tgttattttc	caccatattg	1320
ccgtcttttg	gcaatgtgag	ggcccggaaa	cctggccctg	tcttcttgac	gagcattcct	1380
aggggtcttt	cccctctcgc	caaagggaatg	caaggtctgt	tgaatgtcgt	gaaggaagca	1440
gttcctctgg	aagcttcttg	aagacaaaca	acgtctgtag	cgaccctttg	caggcagcgg	1500
aacccccac	ctggcgacag	gtgcctctgc	ggccaaaagc	cacgtgtata	agatacacct	1560
gcaaaggcgg	cacaacccca	gtgccacgtt	gtgagttgga	tagttgtgga	aagagtcaaa	1620
tggctctcct	caagcgtatt	caacaagggg	ctgaaggatg	cccagaagg	acccatttgt	1680
atgggatctg	atctggggcc	tcggtgcaca	gtgttttagtc	gtgttttagtc	gaggttaaaa	1740
aacgtctagg	ccccccgaac	cacggggagc	tggttttctc	ttgaaaaaca	cgataataacc	1800
atggcgcccta	ttacggcccta	ctcccaacag	acgcgaggcc	tacttggtcg	catcatcact	1860

agcctcacag	gccgggacag	gaaccaggtc	gagggggagg	tccaagtgg	ctccaccgca	1920
acacaatctt	tcctggcgac	ctgcgtcaat	ggcgtgtgtt	ggactgtcta	tcattggtgcc	1980
ggctcaaaga	cccttgccgg	cccaaagggc	ccaatcacc	aatgtacac	caatgtggac	2040
caggacctcg	tcggctggca	agcgccccc	ggggcgcggt	ccttgacacc	atgcacctgc	2100
ggcagctcgg	acchttactt	ggtdacgagg	catgcccgtg	tcattccgggt	ggcgccggcg	2160
ggcgacagca	gggggagcct	actctcccc	aggcccgctc	cctacttgaa	gggtctctcg	2220
ggcggtccac	tgctctgccc	ctcgggggcac	gctgtgggca	tccttcgggc	tgccgtgtgc	2280
acccgagggg	ttgcgaaggc	ggtggacttt	gtaccgctcg	agtctatgga	aaccactatg	2340
cgggtccccg	tcttcacgga	caactcgtcc	cctccggccg	taccgcagac	attccaggtg	2400
gccccatctac	acgccccctac	tggtagcggc	aagagcacta	agggtgccggc	tgcgatgca	2460
gcccagggt	ataaggtgct	tgctcctgaac	ccgtccgtcg	ccgccaccct	agggttcggg	2520
gcgtatatgt	ctaagtcaca	tggtatcgac	cctaaccatca	gaaccgggggt	aaggaccatc	2580
accacgggtg	cccccatcac	gtactccacc	tatggccaagt	ttcttgccga	cgggtggtgc	2640
tctggggggcg	cctatgacat	cataatatgt	gatgagtgc	actcaactga	ctcgaccact	2700
atcctgggca	tcggcacagt	cctggaccaa	gcggagacgg	ctggagcgcg	actcgtcgtg	2760
ctcgccaccg	ctacgcctcc	gggatcggtc	accgtgccac	atccaaacat	cgaggaggtg	2820
gctctgtcca	gcactggaga	aatccccctt	tatggcaaaag	ccatccccat	cgagaccatc	2880
aaggggggga	ggcacctcat	ttctctgcat	tccaagaaga	aatgtgatga	gctcgcccg	2940
aagctgtccg	gcctcggact	caatgctgta	gcataattacc	ggggccttga	tgtatccgtc	3000
ataccaacta	gcggagacgt	cattgtcgta	gcaacggacg	ctctaataac	gggctttacc	3060
ggcgatttcg	actcagtgat	cgactgcaat	acatgtgtca	cccagacagt	cgacttcagc	3120
ctggacccga	ccttcaccat	tgagacgacg	accgtgccac	aagacgcgggt	gtcacgctcg	3180
cagcggcgag	gcaggactgg	tagggggcagg	atgggcattt	acagggtttgt	gactccagga	3240
gaacggccct	cgggcattgtt	cgattcctcg	gtctctgtcg	agtgcctatga	cgcgggctgt	3300
gcttggtacg	agctcacgcc	cgccgagacc	tcagtttaggt	tgccgggctta	cctaaccaca	3360
ccagggttgc	ccgtctgcca	ggaccatctg	gagttctggg	agagcgtctt	tacaggcctc	3420
accacacatag	acgcccattt	cttgtcccag	actaagcagg	caggagacaa	cttcccctac	3480
ctggtagcat	accaggctac	ggtgtgcgcc	agggtctcagg	ctccaccctcc	atcgtgggac	3540
caaagtgtga	agtgtctcat	acggctaaag	cctaogctgc	acggggccaac	gcccctgctg	3600
tataggctgg	gagccgttca	aaacgaggtt	actaccacac	accccataac	caaatacatc	3660
atggcatgca	tgctggctga	cctggaggtc	gtcacgagca	cctgggtgct	ggtaggcgga	3720
gtcctagcag	ctctggccgc	gtattgcctg	acaacaggca	gcgtgggtcat	tgtgggcagg	3780
atcatcttgt	ccggaaagcc	ggccatcatt	cccagacagg	aagtccttta	ccgggagttc	3840
gatgagatgg	aagagtgcgc	ctcacacctc	ccttacatcg	aacagggaat	gcagctcgcc	3900
gaacaattca	aacagaaggc	aatcgggttg	ctgcaaacag	ccaccaagca	agcggagggt	3960
gctgctcccg	tggtggaatc	caagtggcgg	accctcgaag	ccttctgggg	ctggcatatg	4020
tggaaatttca	tcagcgggat	acaatattta	gcaggcttgt	ccactctgcc	tggcaacccc	4080
gcgatagcat	cactgatggc	attcacagcc	tctatcacca	gcccgcctac	cacccaacat	4140
accctcctgt	ttaacatcct	ggggggatgg	gtggccgccc	aacttgctcc	tcccagcgct	4200
gcttctgctt	tcgtaggcgc	cggcatcgct	ggagcggctg	ttggcagcat	aggccttggg	4260
aaggctgctt	tgatattttt	ggcaggttat	ggagcagggg	tggcaggcgc	gctcgtggcc	4320
tttaagggtca	tgagcggcga	gatgccctcc	accgaggacc	tgggttaacct	actccctgct	4380
atcctctccc	ctggcgccct	agtcgtcggg	gtcgtgtgcg	cagcgatact	gcgtcggcac	4440
gtggggcccag	gggagggggc	tgtgcagtg	atgaaccggc	tgatagcggt	cgcttcgcgg	4500
ggtaaccacg	tctccccac	gcactatgtg	cctgagagcg	acgctgcagc	acgtgtcact	4560
catagctctt	ctagtcttac	catcactcag	ctgctgaaga	ggcttcacca	gtggatcaac	4620
gaggactgct	ccagcccatg	ctccggctcg	atgcttaagag	atgttttgga	tgggatatgc	4680
acgggtgttg	ctgatttcaa	gacctggctc	cagtcocaag	tcctgcccgc	attgccggga	4740
gtccccctct	tctcatgtca	acgtgggtac	aagggagtct	ggcggggcga	cggcatcatg	4800
caaaccacct	gcccatgtgg	agcacagatc	accggacatg	tgaaaaacgg	ttccatgagg	4860
atcgtggggc	ctaggacctg	tagtaaacac	tggcatggaa	cattccccat	taacgcgtac	4920
accacggggc	cctgcacgcc	ctccccggcg	ccaaattatt	ctagggcgct	gtggcgggtg	4980
gctgctgagg	agtacgtgga	ggttacggcg	gtgggggatt	tcactactct	gacgggcatg	5040
accactgaca	acgtaaagtg	cccgtgtcag	gttcggcccc	ccgaattctt	cacagaagtg	5100
gatgggggtg	ggttgacacg	gtacgctcca	gcgtgcaaac	ccctcctacg	ggaggaggtc	5160
acattcctgg	tcgggctcaa	tcaataacctg	ggtgggtcac	agctcccatg	cgagcccga	5220
cggagcgtag	cagtgtcac	ttccatgctc	accgaccctt	cccacattac	ggcggagacg	5280
gctaagcgtg	ggctggccag	gggatctccc	ccctccttgg	ccagctcatc	agctatccag	5340
ctgtctgcgc	cttccttgaa	ggcaaacatgc	actaccctgc	atgactcccc	ggacgctgac	5400
ctcatcgagg	ccaacctcct	gtggcggcag	gagatggggc	ggaacatcac	ccgcgtggag	5460
tcagaaaata	aggtagtaat	tttgaggtct	ttcgagccgc	tccaagcggg	ggaggatgag	5520
agggaagtat	ccgttcgggc	ggagatcctg	cggaggtcca	ggaaattccc	tcgagcgatg	5580
cccatatggg	cacgcccggg	ttacaacctc	ccactggttag	agtcctggaa	ggacccggac	5640
tacgtccctc	cagtggtaca	cgggtgtcca	ttgcgcctcg	ccaaggcccc	tcgatacca	5700
cctccacgga	ggaagaggac	ggttgtcctg	tcagaatcta	ccgtgtcttc	tgcttggcg	5760
gagctcgcca	caaagacctt	cggcagctcc	gaatcgtcgg	ccgtcgacag	cggcacggca	5820

acggcctctc	ctgaccagcc	ctccgacgac	ggcgacgcgg	gatccgacgt	tgagtcgtac	5880
tcctccatgc	cccccttga	gggggagccg	ggggatcccg	atctcagcga	cgggtcttgg	5940
tctaccgtaa	gcgaggaggc	tagtgaggac	gtcgtctgct	gctcgatgtc	ctacacatgg	6000
acaggcgccc	tgatcacgcc	atgcgctgcg	gaggaaacca	agctgcccat	caatgcactg	6060
agcaactctt	tgctccgtca	ccacaacttg	gtctatgcta	caactctctg	ccggcgaaagc	6120
ctgcggcaga	agaaggtcac	ctttgacaga	ctgcaggctc	tggaacgacca	ctaccgggac	6180
gtgctcaagg	agatgaaggc	gaaggcgtcc	acagttaagg	ctaaacttct	atccgtggag	6240
gaagcctgta	agctgacgcc	cccacattcg	gccagatcta	aatttggcta	tggggcгаааg	6300
gacgtccgga	acctatccag	caaggccgtt	aaccacatcc	gctccgtgtg	gaaggacttg	6360
ctggaagaca	ctgagacacc	aattgacacc	accatcatgg	caaaaaatga	ggttttctgc	6420
gtccaaccag	agaagggggg	ccgcaagcca	gctcgcctta	tcgtattccc	agatttgggg	6480
gttcgtgtgt	gcgagaaaaa	ggccctttac	gatgtggtct	ccaccctccc	tcaggccgtg	6540
atgggctctt	ccaatcgatt	ccaatactct	cctggacagc	gggtcgagtt	cctggtaagt	6600
gcctggaaag	cgaagaaatg	ccctatgggc	ttcgcatatg	acaccgctg	ttttgactca	6660
acggctcactg	agaatgacat	ccgtgttgag	gagtcaatct	accaatgttg	tgacttggcc	6720
cccgaagcca	gacaggccat	aaggctcgctc	acagagcggc	tttacatcgg	gggccccctg	6780
actaattcta	aagggcgaaa	ctgcggtctat	cgccggtgcc	gcgcgagcgg	tgtactgacg	6840
accagctgcg	gtaataccct	cacatgttac	ttgaaggccg	ctgcggcctg	tcgagctgcg	6900
aagctccagg	tctccatcct	gctcgatagc	ggagacgacc	ttgtcgttat	ctgtgaaagc	6960
gcggggaccc	aagaggacga	ggcgagccta	ggggccttca	cggaggctat	gactagatac	7020
tctgcccccc	ctggggaccc	gcccacacca	gaatacgact	tggaagttag	aacatcatgc	7080
tcctccaatg	tgctcagtcg	gcacgatgca	tctggcaaaa	gggtgtacta	tctcaccctg	7140
gaccccacca	cccccttgc	gcgggctgcg	tgggagacag	ctagacacac	tccagtcaat	7200
tcttggtctag	gcaacatcat	catgtatgcg	cccaccttgg	gggcaaggat	gatcctgatg	7260
actcatttct	tctccatcct	tctagctcag	gaacaacttg	aaaaagccct	agattgtcag	7320
atctacgggg	cctgttactc	cattgagcca	cttgacctac	ctcagatcat	tcaacgactc	7380
catggcctta	gcgcattttc	actccatagt	tactctccag	gtgagatcaa	taggggtggct	7440
tcatgcctca	ggaaacttgg	ggtaccgccc	ttgcgagctc	ggagacatcg	ggccagaagt	7500
gtccgcgcta	ggctactgtc	ccaggggggg	agggctgcca	cttgtggcaa	gtacctcttc	7560
aactgggcag	taaggaccaa	gctcaaactc	actccaatcc	cggctgcgtc	ccagtgggat	7620
ttatccagct	ggttcgttgc	tggttacagc	gggggagaca	tatatcacag	cctgtctcgt	7680
gcccgaaccc	gctggttcat	gtggtgccta	ctcctacttt	ctgtaggggt	aggcatctat	7740
ctactcccca	accgatgaac	ggggacctaa	acactccagg	ccaataggcc	atcctgtttt	7800
tttccctttt	tttttttctt	tttttttttt	tttttttttt	tttttttttt	ttctcctttt	7860
tttttctctt	ttttttcctt	ttctttcctt	tggtggctcc	atcttagccc	tagtcacggc	7920
tagctgtgaa	aggctcgtga	gccgcttgac	gtcagagagt	gctgatactg	gcctctctgc	7980
agatcaagta	ctcctgcagg	cgcgccacta	gtgggaatac	gcggggtatg	ccgcgtttta	8040
gcatattgac	gacccaattc	tcatgtttga	cagcttatca	tcgataagct	ttaatgcggg	8100
agtttatcac	agttaaattg	ctaacgcagt	caggcaccgt	gtatgaaatc	taacaatgcg	8160
ctcatcgtea	tcctcggcac	cgtcacccctg	gatgctgtag	gcataggctt	ggttatgccg	8220
gtactgcggg	gcctcttgcg	ggatategtc	cattccgaca	gcategccag	tcactatggc	8280
gtgctgcctg	gtgtatatgc	gttgatgcga	tttctatgcy	caccogttct	cggagcactg	8340
tcgcagccgt	ttggccgcgg	cccagtcctg	ctcgcttcgc	tacttggagc	cactatcgac	8400
tacgcgatca	tggcgaccac	accogtcctg	tggatcctct	acgcgggacg	catcgtggcc	8460
ggcatcaccg	gcgcacacag	tgcggttgct	ggcgccctata	tcgcggacat	caccgatggg	8520
gaagatcggg	ctcgccactt	cgggctcatg	agcgcttggt	tcggcggtggg	tatgggtggca	8580
ggccccgtgc	ccgggggact	gttggggcgc	atctccttgc	atgcaccatt	ccttcggcg	8640
gcgggtgcga	acggcctcaa	cctactactg	ggctgcttcc	taatgcagga	cttcgcataag	8700
ggagagcgte	gaccgatgcc	cttgagagcc	ttcaaccacg	tcagctcctt	ccggtggggc	8760
cggggcatga	ctatcgctcg	cgcacttatg	actgtcttct	ttatcatgca	actcgtagga	8820
caggtgcggg	cagcgctctg	ggtcattttc	ggcgaggacc	gctttcgctg	gagcgcgacg	8880
atgatcggcc	tgctcgcttg	ggtattcgga	atcttgcaag	ccctcgctca	agccttcgct	8940
actggtcccg	ccaccaaacy	tttcggcgag	aagcaggcca	ttatcgccgg	catgtccggc	9000
gacgcgctgg	gctacgtctt	gctggcgctc	gcgacgcgag	gctggatggc	cttccccatt	9060
atgattcttc	tcgcttccgg	cggcatcggg	atgccgcgct	tgcaggccat	gctgtccagg	9120
caggtagatg	acgaccatca	gggacagctt	caaggatcgc	tcgcggctct	taccagccta	9180
acttcgatca	ctggaccgct	gatcgtcacg	gcgatttatg	ccgcctcggc	gagcacatgg	9240
aacgggttgg	catggattgt	agggcgccgc	ctataccttg	tctgcctccc	cgcgttgctg	9300
cgcggtgcat	ggagccgggc	cacctcgacd	tgaatgggag	ccggcggcac	ctcgctaacy	9360
gattcaccac	tccaagaatt	ggagccaatc	aattcttgcy	gagaactgtg	aatgcgcaaa	9420
ccaacccttg	gcagaacata	tccatcgctg	ccgccatctc	cagcagccgc	acgcggcgca	9480
tctcgggcag	cgttgggtcc	tggccacggg	tgcgcgatgat	cgtgctcctg	tcgttgagga	9540
cccggctag	ctggcggggt	tgccttactg	gttagcagaa	tgaatcaccg	atacgcgagc	9600
gaacgttaag	cgactgctgc	tgcaaaacgt	ctgcgacctg	agcaacaaca	tgaattggtct	9660
tcgggttccg	tgtttcgtaa	agtctggaaa	cgcgggaagt	agcgccctgc	accattatgt	9720
tccggatctg	catcgcagga	tgctgctggc	taccctgtgg	aacacctaca	tctgtattaa	9780

cgaagcgctg	gcattgaccc	tgagtgattt	ttctctggtc	ccgccgcac	cataccgcca	9840
gttggtttacc	ctcacaacgt	tccagtaacc	gggcatgttc	atcatcagta	acccgtatcg	9900
tgagcatcct	ctctcgtttc	atcgggtatca	ttacccccat	gaacagaaat	tcccccttac	9960
acggaggcat	caagtgacca	aacaggaaaa	aaccgccctt	aacatggccc	gctttatcag	10020
aagccagaca	ttaacgcttc	tggagaaact	caacgagctg	gacgcggatg	aacagggcaga	10080
catctgtgaa	tcgcttcacg	accacgctga	tgagctttac	cgcagctgcc	tcgcgcgttt	10140
cgggtgatgac	ggtgaaaacc	tctgacacat	gcagctcccc	gagacgggtca	cagcttgtct	10200
gtaagcggat	gccgggagca	gacaagcccc	tcagggcgcg	tcagcgggtg	ttggcgggtg	10260
tcggggcgca	gccatgaccc	agtcacgtag	cgatagcgga	gtgtatactg	gcttaactat	10320
gcggcatcag	agcagattgt	actgagagtg	caccatatgc	ggtgtgaaat	accgcacaga	10380
tgcgtaagga	gaaaataccg	catcaggcgc	tcttccgctt	cctcgctcac	tgactcgctg	10440
cgctcggtcg	ttcggctgcg	gcgagcggtg	tcagctcact	caaaggcggt	aatacggtta	10500
tccacagaat	caggggataa	cgcaggaaag	aacatgtgag	caaaaggcca	gcaaaaggcc	10560
aggaaccgta	aaaaggccgc	gttgctggcg	tttttccata	ggctccgccc	ccctgacgag	10620
catcacaaaa	atcgacgctc	aagtcagagg	tggcgaaacc	cgacaggact	ataaagatac	10680
caggcgctttc	cccctggaag	ctccctcgctg	cgctctcctg	ttccgaccct	gcgcgttacc	10740
ggatacctgt	ccgcctttct	cccttcggga	agcgtggcgc	tttctcatag	ctcacgctgt	10800
aggtatctca	gttcgggtga	ggtcgttcgc	tccaagctgg	gctgtgtgca	cgaaccccc	10860
gttcagcccc	accgctgcgc	cttatccggt	aactatcgctc	ttgagtccaa	cccggtaaga	10920
cacgacttat	cgccactggc	agcagccact	ggtaacagga	ttagcagagc	gaggtatgta	10980
ggcgggtgcta	cagagttctt	gaagtgggtg	cctaactacg	gctacactag	aaggacagta	11040
tttggtatct	gcgctctgct	gaagccagtt	accttcggaa	aaagagttgg	tagctcttga	11100
tccggcaaac	aaaccaccgc	tggtagcggg	ggtttttttg	tttgcaagca	gcagattacg	11160
cgcagaaaaa	aaggatctca	agaagatcct	ttgatctttt	ctacggggtc	tgacgctcag	11220
tggaaacgaaa	actcacgtta	agggattttg	gtcatgagat	tatcaaaaag	gatcttcacc	11280
tagatccttt	tctagataat	acgactcact	ata			11313

<210> 3

<211> 11313

<212> DNA

<213> Artificial Sequence

<220>

<223> Plasmid

<400> 3

gccagcccc	gattgggggc	gacactccac	catagatcac	tcccctgtga	ggaactactg	60
tcttcacgca	gaaagcgtct	agccatggcg	ttagtatgag	tgctgtgcag	cctccaggac	120
ccccctcccc	gggagagcca	tagtgggtctg	cggaaccggg	gagtaacacc	gaattgccag	180
gacgaccggg	tccctttctt	gatcaaaccc	ctcaatgcct	ggagatttgg	gcgtgcccc	240
gcgagactgc	tagccgagta	gtgttgggtc	gcgaaaggcc	ttgtgggtact	gcctgatagg	300
gtgcttgcca	gtgccccggg	aggtctcgtg	gaccgtgcac	catgagcacg	aatcctaaac	360
ctcaaagaaa	aaccaaaggg	cgcgccatga	ttgaacaaga	tggattgcac	gcaggttctc	420
cggccgcttg	ggtggagagg	ctattcggct	atgactgggc	acaacagaca	atcggctgct	480
ctgatcccg	ctgtttccgg	ctgtcagcgc	agggcgcccc	ggttcttttt	gtcaagaccg	540
acctgtccgg	tgcctgaat	gaactgcagg	acgaggcagc	gcggctatcg	tggctggcca	600
cgacgggctg	tccttgccga	gctgtgctcg	acgttgtcac	tgaagcggga	agggactggc	660
tgctattggg	cgaagtgcgg	gggcaggatc	tcctgtcatc	tcaccttgct	cctgccgaga	720
aagtatccat	catggctgat	gcaatgcggc	ggctgcatac	gcttgatccg	gctacctgcc	780
cattcgacca	ccaagcgaaa	catcgcatcg	agcgagcacg	tactcggatg	gaagccgggtc	840
ttgtcgatca	ggatgatctg	gacgaagagc	atcaggggct	cgcgccagcc	gaactgttcc	900
ccaggctcaa	ggcgcgcgat	cccgaacggc	aggatctcgt	cgtgacccat	ggcgatgcct	960
gcttgccgaa	tatcatgggt	gaaaatggcc	gcttttctgg	attcatcgac	tgtggccggc	1020
tgggtgtggc	ggaccgctat	caggacatag	cgttggctac	ccgtgatatt	gctgaagagc	1080
ttggcggcga	atgggctgac	cgcttcctcg	tgctttacgg	tatcgccgct	cccgattcgc	1140
agcgcatacg	cttcttatcg	cttcttgacg	agttcttctg	agtttaaaaca	gaccacaacg	1200
gtttccctct	agcgggatca	attccgcccc	tctccctccc	ccccccctaa	cgttactggc	1260
cgaagccgct	tgggaataagg	ccggtgtgcg	tttgtctata	tgttattttc	caccatattg	1320
ccgtcttttg	gcaatgtgag	ggcccggaaa	cctggccctg	tcttcttgac	gagcattcct	1380
aggggtcttt	ccctctctcg	caaaggaatg	caaggtctgt	tgaatgtcgt	gaaggaagca	1440
gttctctctg	aagcttcttg	aagacaaaca	acgtctgtag	cgaccctttg	caggcagcgg	1500
aacccccac	ctggcgacag	gtgcctctgc	ggccaaaagc	cacgtgtata	agatacacct	1560
gcaaaggcgg	cacaacccca	gtgccacgtt	gtgagttgga	tagttgtgga	aagagtcaaa	1620
tggctctcct	caagcgtatt	caacaagggg	ctgaaggatg	cccagaaggt	acccatttgt	1680

atgggatctg	atctggggcc	tcggtgcaca	tgctttacat	gtgttttagtc	gaggttaaaa	1740
aacgtctagg	ccccccgaac	cacgggggacg	tggttttccct	ttgaaaaaca	cgataataacc	1800
atggcgcccta	ttacggcccta	ctcccaacag	acgcgaggcc	tacttggtctg	catcatcact	1860
agcctcacag	gcccgggacag	gaaccagggtc	gagggggagg	tccaagtgggt	ctccaccgca	1920
acacaatctt	tccctggcgac	ctgcgtcaat	ggcgtgtgtt	ggactgtcta	tcatggtgac	1980
ggctcaaaga	cccttgccgg	cccaaagggc	ccaatcacc	aaatgtacac	caatgtggac	2040
caggacctcg	tcggctggca	agcgccccc	ggggcgcggt	ccttgacacc	atgcacctgc	2100
ggcagctcgg	acctttactt	ggtcacgagg	catgccgatg	tcattccgggt	gcgcggcgcg	2160
ggcgacagca	ggggggagcct	actctcccc	aggcccgtct	cctacttgaa	gggctcttcg	2220
ggcgggtccac	tgctctgccc	ctcggggcac	gctgtgggca	tctttcgggc	tgccgtgtgc	2280
acccggaagg	ttgcgaaggc	ggtggacttt	gtaccgcgtc	agtctatgga	aaccactatg	2340
cggctccccg	tcttcacgga	caactcgtcc	cctccggcgg	taccgcagac	attccagggtg	2400
gcccattctac	acgcccctac	tggtagcggc	aagagcacta	aggtgcccgg	tgctgtatgca	2460
gcccgaagggt	ataagggtgct	tgtcctgaac	ccgtccgtcg	ccgccaccct	aggtttcggg	2520
gcgtatatgt	ctaaggcaca	tggtatcgac	cctaaccatca	gaaccgggggt	aaggaccatc	2580
accacgggtg	cccccatcac	gtactccacc	tatggcaagt	ttcttgccga	cgggtggttgc	2640
tctggggggc	ccttagacat	cataatatgt	gatgagtgc	actcaactga	ctcgaccact	2700
atcctgggca	tcggcacagt	cctggaccac	gcggagacgg	ctggagcgcg	actcgtcgtg	2760
ctcgccaccg	ctacgcctcc	gggatcgggtc	accgtgccac	atccaaacat	cgaggagggtg	2820
gctctgtcca	gcactggaga	aatccccctt	tatggcaaag	ccatccccat	cgagaccatc	2880
aagggggggga	ggcacctcat	tttctgccc	tccaagaaga	aatgtgatga	gctcgcccg	2940
aagctgtccg	gcctcggact	caatgctgta	gcatattacc	ggggccttga	tgtatccgtc	3000
ataccaacta	gcggagacgt	cattgtcgta	gcaacggacg	ctctaattgac	gggctttacc	3060
ggcgatttctg	cctcagtgat	cgactgcaat	acatgtgtca	cccagacagt	cgacttcagc	3120
ctggaccgca	ccttcaccat	tgagacgacg	accgtgccac	aagacgcgggt	gtcacgctcg	3180
cagcggcgag	gcaggactgg	taggggcagg	atgggcattt	acaggtttgt	gactccagga	3240
gaacggccct	cgggcatgtt	cgattccctcg	gttctgtgcg	agtgttatga	cgcgggctgt	3300
gcttggtacg	agctcacgcc	cgccgagacc	tcagttagggt	tgccgggctta	cctaaacaca	3360
ccagggttgc	ccgtctgcca	ggaccatctg	gagttctggg	agagcgctct	tacagccctc	3420
accacatag	acgcccattt	cttgtcccag	actaagcagg	caggagacaa	cttcccctac	3480
ctggtagcat	accaggctac	ggtgtgcgcc	agggctcagg	ctccacctcc	atcgtgggac	3540
caaattgtgga	agtgtctcat	acggctaaag	cctacgctgc	acggggccaa	gcccctgctg	3600
tataggctgg	gagccgttca	aaacgaggtt	actaccacac	accccataac	caaatacatc	3660
atggcatgca	tgtcagctga	cctggagggtc	gtcacgagca	cctgggtgct	ggtaggcgga	3720
gtcctagcag	ctctgcccgc	gtattgccc	acaacaggca	gcgtgggtcat	tgtggcgagg	3780
atcatcttgt	ccggaaagcc	ggccatcatt	cccagacagg	aagtctttta	ccgggagttc	3840
gatgagatgg	aagagtgcgc	ctcacacctc	ccttacatcg	aacggggaat	gcagctcgcc	3900
gaacatttca	aacagaaggc	aatcgggttg	ctgcaaacag	ccaccaagca	agcggaggct	3960
gctgctcccc	cgggtggaatc	caagtggcgg	accctcgaag	ccttctgggc	gaagcatatg	4020
tggaatttca	tcagcgggat	acaatattta	gcaggcttgt	ccactctgcc	tgggacaccc	4080
gcgatagcat	cactgatggc	attcacagcc	tctatcacca	gcccgtcac	caccaacat	4140
accctcctgt	ttaacatcct	ggggggatgg	gtggccgccc	aaactgtctc	tcccagcgct	4200
gcttctgctt	togtaggcgc	cggcatcgct	ggagcggctg	ttggcagcat	aggccttggg	4260
aaggtgcttg	tggatatttt	ggcaggttat	ggagcagggg	tggcagggcg	gctcgtggcc	4320
tttaagggtca	tgagcggcga	gatgccctcc	accgaggacc	tgggttaacct	actccttgc	4380
atcctctccc	ctggcgccct	agtcgtcggg	gtcgtgtgcg	cagcgatact	gcgtcggcac	4440
gtgggcccag	gggagggggc	tgtgcagttg	atgaaccggc	tgatagcggt	cgcttcgcgg	4500
ggtaaccacg	tctcccccc	gcactatgtg	cctgagagcg	acgctgcagc	acgtgtcact	4560
cagatcctct	ctagtcttac	catcactcag	ctgctgaaga	ggcttcacca	gtggatcaac	4620
gaggactgct	ccacgccatg	ctccggctcg	tggctaagag	atgtttggga	ttggatatgc	4680
acgggtgttg	ctgatttcaa	gacctggctc	cagtcacaag	tcctgcccgc	attgccggga	4740
gtccccttct	tctcatgtca	acgtgggtac	aaggagctct	ggcggggcga	cggcatcatg	4800
caaaccacct	gcccattgtg	agcacagatc	accggacatg	tgaaaaacgg	ttccatgagg	4860
atcgtggggc	ctaggacctg	tagtaacacg	tggcatggaa	cattccccat	taacgcgtac	4920
accacggggc	cctgcacgcc	ctccccggcg	ccaaattatt	ctagggcgct	gtggcgggtg	4980
gctgctgagg	agtacgtgga	ggttacgcgg	gtgggggatt	tccactacgt	gacgggcatg	5040
accactgaca	acgtaaagtg	cccgtgtcag	gttcgggcc	ccgaattctt	cacagaagtg	5100
gatgggggtg	ggttgcacag	gtacgtccca	gcgtgcaaac	ccctcctacg	ggaggaggtc	5160
acattcctgg	tcgggctcaa	tcaatacctg	gttggttcac	agctcccatg	cgagcccgaa	5220
ccggacgtag	cagtgtctac	ttccatgtct	accgacccct	cccacattac	ggcggagacg	5280
gctaagcgta	ggctggccag	gggatctccc	ccctccttgg	ccagctcatc	agctatccag	5340
ctgtctgcgc	cttccttgaa	ggcaacatgc	actaccgcgc	atgactcccc	ggacgctgac	5400
ctcatcgagg	ccaacctcct	gtggcgcgag	gagatggggc	ggaacatcac	ccgcgtggag	5460
tcagaaaata	aggtagtaat	tttggagtct	ttcgagccgc	tccaagcgga	ggaggttagg	5520
agggaagtat	ccgttccggc	ggagatcctg	cggaggtcca	ggaaattccc	tcgagcgatg	5580
cccatatggg	cacgcccga	ttacaacctt	ccactgttag	agtcctggaa	ggacccggac	5640

tacgtccctc	cagtgggtaca	cgggtgtcca	ttgccgcctg	ccaaggcccc	tccgatacca	5700
cctccacgga	ggaagaggac	ggttgtcctg	tcagaatcta	ccgtgtcttc	tgccttggcg	5760
gagctcgcca	caaagacctt	cggcagctcc	gaatcgtcgg	ccgtcgacag	cggcacggca	5820
acggcctctc	ctgaccagcc	ctccgacgac	ggcgacgcgg	gatccgacgt	tgagtcgtac	5880
tctcccatgc	cccccttga	gggggagcgg	ggggatcccg	atctcagcga	cgggtcttgg	5940
tctaccgtaa	gcgaggaggc	tagtgaggac	gtcgtctgct	gctcgatgtc	ctacacatgg	6000
acaggcgccc	tgatcacgcc	atgcgctgcg	gaggaaacca	agctgcccac	caatgcactg	6060
agcaactctt	tgctccgtca	ccacaacttg	gtctatgcta	caacatctcg	cagcgcaagc	6120
ctgcggcaga	agaaggtcac	ctttgacaga	ctgcaggctc	tggacgacca	ctaccgggac	6180
gtgctcaagg	agatgaaggc	gaaggcgctc	acagttaagg	ctaaacttct	atccgtggag	6240
gaagcctgta	agctgacgcc	cccacattcg	gccagatcta	aattttggcta	tggggcgaag	6300
gacgtccgga	acctatccag	caaggcggct	aaccacatcc	gctccgtgtg	gaaggacttg	6360
ctggaagaca	ctgagacacc	aattgacacc	accatcatgg	caaaaaatga	ggttttctgc	6420
gtccaaccag	agaagggggg	ccgcaagcca	gctcgcctta	tcgtattccc	agatttgggg	6480
gttcgtgtgt	gcgagaaaat	ggccctttac	gatgtgggtc	ccaccctccc	tcaggccgtg	6540
atgggctctt	catacggatt	ccaatactct	cctggacagc	gggtcgagtt	cctgggtgaat	6600
gcttggaag	cgaagaaatg	ccctatgggc	ttgcataatg	acaccgcgtg	ttttgactca	6660
acggctactg	agaatgacat	cogtgttgag	gagtcacatc	accaatggtg	tgacttggcc	6720
cccgaagcca	gacaggccat	aaggtcgctc	acagagcggc	tttacatcgg	gggccccctg	6780
actaattcta	aagggcagaa	ctgctggctat	cgccgggtgc	gcgcgagcgg	tgtactgacg	6840
accagctgcg	gtaataccct	cacatgtttac	ttgaaggccg	ctgctggcctg	tcgagctgcg	6900
aagctccagg	actgcacgat	gctcgtatgc	ggagacgacc	ttgtcgttat	ctgtgaaagc	6960
gcggggaccc	aagaggacga	ggcgagccta	cgggccttca	cggaggctat	gactagatac	7020
tctgcccccc	ctgggggacc	gcccaaacca	gaatacgact	tggagttgat	aacatcatgc	7080
tcttccaatg	tgtcagtcgc	gcacgatgca	tctggcaaaa	gggtgtacta	tctcacccgt	7140
gacccccacca	cccccttgc	gcgggctgcg	tgggagacag	ctagacacac	tccagtcaat	7200
tcttggtctag	gcaacatcat	catgtatgcg	cccaccttgt	gggcaaggat	gatcctgatg	7260
actcatttct	tctccatcct	tctagctcag	gaacaacttg	aaaaagccct	agattgtcag	7320
atctacgggg	cctgttactc	cattgagcca	cttgacctac	ctcagatcat	tcaacgactc	7380
catggcctta	gcgcattttc	actccatagt	tactctccag	gtgagatcaa	taggttggct	7440
tcatgcctca	ggaaacttgg	ggtaccgccc	ttgcgagctc	ggagacatcg	ggccagaagt	7500
gtccgcgcta	ggctactgtc	ccaggggggg	agggctgcca	cttgtggcaa	gtacctcttc	7560
aactgggcag	taaggaccaa	gctcaaactc	actccaatcc	cggctgcgtc	ccagttggat	7620
ttatccagct	ggttcgttgc	tggttacagc	gggggagaca	tatatcacag	cctgtctcgt	7680
gcccgcaccc	gtgggttcat	gtgggtgccta	ctctactttt	ctgtaggggt	aggcatctat	7740
ctactcccca	accgatgaac	ggggaccta	acactccagg	ccaataggcc	atcctgtttt	7800
tttccctttt	tttttttctt	tttttttttt	tttttttttt	tttttttttt	ttctcctttt	7860
tttttccctt	ttttttcctt	ttctttcctt	tgggtggctcc	atcttagccc	tagtcacggc	7920
tagctgtgaa	aggctccgtg	gccgcttgac	tgcagagagt	gctgatactg	gcctctctgc	7980
agatcaagta	ctcctgcagg	cgcgccacta	gtgggaatac	gcgggggtatg	ccgcgtttta	8040
gcatattgac	gacccaattc	tcattgttga	cagcttatca	tcgataagct	ttaatgcggt	8100
agtttatcac	agttaaattg	ctaacgcagt	caggcacctg	gtatgaaatc	taacaatgcg	8160
ctcatcgta	tcttcggcac	cgtcaccctg	gatgctgtag	gcataggctt	ggttatgccg	8220
gtactgcccg	gcctcttgcg	ggatatcgct	cattccgaca	gcatcgccag	tcactatggc	8280
tgtctgtatg	cgctatatgc	ggtgatgcaa	tttctatgcg	caccggttct	cggagcactg	8340
tccgaccgct	ttggccgccc	cccagtcctg	ctcgtctcgc	tacttggagc	catcatcgac	8400
tacgcgatca	tggcgaccac	accgctcctg	tggatcctct	acgcgggacg	catcgtggcc	8460
ggcatcaccg	gcgccacagg	tgcggttgct	ggcgccctata	tcgccgacat	caccgatggg	8520
gaagatcggg	ctcgccactt	cgggctcatg	agcgcttggt	tcggcggtggg	tatggtggca	8580
ggccccgtgg	ccgggggact	ggtggggcgc	atctccttgc	atgcaccatt	ccttgcggcg	8640
gcgggtgctca	acggccctca	cctactactg	ggctgcttcc	taatgcagga	gtcgcataag	8700
ggagagcgtc	gaccgatgcc	cttgagagcc	ttcaaccag	tcagctcctt	ccggtggcg	8760
cggggcatga	ctatcgctgc	cgcacttatg	actgtcttct	ttatcatgca	actcgtaggga	8820
caggtgccgg	cagcgctctg	ggtcattttc	ggcgaggacc	gctttcgtctg	gagcgcgacg	8880
atgatcggcc	tgtcgcttgc	ggtattcgga	atcttgacag	ccctcgctca	agccttcgtc	8940
actggtcccc	ccaccaaacg	tttcggcgag	aagcaggcca	ttatcgccgg	catggcggcc	9000
gacgccttgg	gctacgtctt	gctggcgctt	gcgacgcgag	gctggatggc	cttccccatt	9060
atgattcttc	tcgcttcggg	cggcatcggg	atgcccgct	tgcaggccat	gctgtccagg	9120
caggtagatg	acgaccatca	gggacagctt	caaggatcgc	tcgcggctct	taccagccta	9180
acttcgatca	ctggaccgct	gatcgtcacg	gcgatttatg	ccgcctcggc	gagcacatgg	9240
aacgggttgg	catggattgt	aggcgccgcc	ctataccttg	tctgcctccc	cgcgttgcgt	9300
cgcggtgcat	ggagccgggc	cacctcgacc	tgaatggaag	ccggcggcac	ctcgctaacc	9360
gattccacac	tccaagaatt	ggagccaatc	aattcttgcg	gagaactgtg	aatgcgcaaa	9420
ccaacccttg	gcagaacata	tccatcgctg	ccgccatctc	cagcagccgc	acgcggcgca	9480
tctcgggcag	cgttgggtcc	tggccacggg	tgcgcatgat	cgtgctcctg	tcgttgagga	9540
cccggctagg	ctggcggggg	tgccttactg	gttagcagaa	tgaatcaccg	atacgcgagc	9600

gaacgtgaag	cgactgctgc	tgcaaaacgt	ctgcgacctg	agcaacaaca	tgaatgggtct	9660
tccggtttccg	tggtttcgtaa	agtctggaaa	cgcggaagtc	agcgccctgc	accattatgt	9720
tccgcatctg	catcgagga	tgctgctggc	taccctgtgg	aacacctaca	tctgtattaa	9780
cgaagcgctg	gcattgaccc	tgagtgattt	ttctctgggtc	ccgcgcgcatc	cataccgcca	9840
gttgttttagc	ctcacaacgt	tccagtaacc	gggcatgttc	atcatcagta	acccgtatcg	9900
tgagcatcct	ctctcgtttc	atcggatatca	ttaccccat	gaacagaaat	tcccccttac	9960
acggaggcat	caagtgacca	aacaggaaaa	aaccgccctt	aacatggccc	gctttatcag	10020
aagccagaca	ttaacgcttc	tggagaaact	caacgagctg	gacgcggtatg	aacaggcaga	10080
catctgtgaa	tgcgttcacg	accacgctga	tgagctttac	cgcagctgcc	tgcgcgcttt	10140
cgggtgatgac	ggtgaaaacc	tctgacacat	gcagctcccc	gagacggtca	cagcttgtct	10200
gtaagcggat	gccgggagca	gacaagcccc	tcaggggcgcg	tcagcgggtg	ttggcgggtg	10260
tcggggcgca	gccatgaccc	agtcacgtag	cgatagcgga	gtgtatactg	gcttaactat	10320
gcggcatcag	agcagattgt	actgagagtg	caccatatgc	gggtgtgaaat	accgcacaga	10380
tgcgtaagga	gaaaataccg	catcaggcgc	tcttccgctt	cctcgctcac	tgactcgctg	10440
cgctcggctcg	ttcggctgcg	gcgagcggta	tcagctcact	caaaggcggt	aatacggtta	10500
tccacagaat	caggggataa	cgcaggaaag	aacatgtgag	caaaaggcca	gcaaaaggcc	10560
aggaaccgta	aaaaggccgc	ggtgctggcg	tttttccata	ggctccgccc	ccctgacgag	10620
catcacaaaa	atcgacgctc	aagtacagag	tggcgaaacc	cgacaggact	ataaagatac	10680
caggcgtttc	ccccgggaag	ctccctcgctg	cgcctcctcg	ttccgacct	gccgcttacc	10740
ggatacctgt	ccgcctttct	cccttcggga	agcgtggcgc	tttctcatag	ctcacgctgt	10800
aggtatctca	gttcgggtgta	ggtcgttcgc	tccaagctgg	gctgtgtgca	cgaaccccc	10860
gttcagcccg	accgctgcgc	cttatccggt	aactatcgtc	ttgagtccaa	cccggtaaga	10920
cacgacttat	cgccactggc	agcagccact	ggtaacagga	ttagcagagc	gaggtatgta	10980
ggcggtgcta	cagacttctt	gaagtgggtg	gactaacacg	gctacactag	aaggacagta	11040
tttggtatct	gcgctctgct	gaagccagtt	accttcggaa	aaagagttgg	tagctcttga	11100
tccggcaaac	aaaccaccgc	tggtagcggg	ggtttttttg	tttgcaagca	gcagattacg	11160
cgcagaaaaa	aaggatctca	agaagatcct	ttgatctttt	ctacgggggtc	tgacgctcag	11220
tggaaacgaaa	actcacgtta	agggattttg	gtcatgagat	tatcaaaaag	gatcttcacc	11280
tagatccttt	tctagataat	acgactcact	ata			11313

<210> 4

<211> 11313

<212> DNA

<213> Artificial Sequence

<220>

<223> Plasmid

<400> 4

gccagccccc	gattggggggc	gacactccac	catagatcac	tccccgtgta	ggaactactg	60
tcttcacgca	gaaagcgtct	agccatggcg	ttagtatgag	tgctgtgcag	cctccaggac	120
ccccctccc	gggagagcca	tagtggtctg	cggaaaccgg	gagtacaccg	gaattgccag	180
gacgaccggg	tcccttcttg	gatcaaccgc	ctcaatgcct	ggagatttgg	gcgtgcccc	240
gcgagactgc	tagccgagta	gtgttgggtc	gcgaaaggcc	ttgtgggtact	gcctgatagg	300
gtgcttgcg	gtgccccggg	aggtctcgta	gaccgtgcac	catgagcacg	aatcctaaac	360
ctcaaagaaa	aaccaaaggg	cgcgccatga	ttgaacaaga	tggtatgcac	gcagggttctc	420
cggccgcttg	ggtggagagg	ctattcggct	atgactgggc	acaacagaca	atcggctgct	480
ctgatgccgc	cgtgttccgg	ctgtcagcgc	aggggcgccc	ggttcttttt	gtcaagaccg	540
acctgtccgg	tgccctgaat	gaactgcagg	acgaggcagc	gcggctatcg	tggttgccca	600
cgaaggcgct	tccttgcgca	gctgtgctcg	acgttgtcac	tgaagcggga	agggactggc	660
tgetattggg	cgaagtgcgc	gggcaggatc	tctgtcacc	tcaccttgct	cctgccgaga	720
aagtatccat	catggctgat	gcaatgcggc	ggctgcatac	gcttgatccg	gctacctgcc	780
cattcgacca	ccaagcgaaa	catcgcatcg	agcgagcacg	tactcggatg	gaagccggtc	840
ttgtcgatca	ggatgatctg	gacgaagagc	atcaggggct	cgcgccagcc	gaactgttcg	900
ccaggctcaa	ggcgcgcgatg	cccgcggcgc	aggatctcgt	cgtgacctat	ggcgatgcct	960
gcttgccgaa	tatcatgggtg	gaaaatggcc	gcttttcttg	attcatcgac	tgtggccggc	1020
tgggtgtggc	ggaccgctat	caggacatag	cgttggtctac	ccgtgatatt	ctggaagagc	1080
ttggcggcga	atgggctgac	cgttctctcg	tgctttacgg	tatcgccgct	cccgatctgc	1140
agcgcacgc	cttctatcgc	cttcttgacg	agttcttctg	agtttaaaca	gaccacaacg	1200
gtttccctct	agcgggatca	attccgcccc	tctccctccc	ccccccctaa	cgttactggc	1260
cgaagccgct	tggataaagg	ccggtgtgcg	tttgtctata	tgttattttc	caccatattg	1320
ccgtcttttg	gcaatgtgag	ggcccggaaa	cctggccctg	tcttcttgac	gagcattcct	1380
aggggtcttt	cccctctcgc	caaaggaatg	caaggctctg	tgaatgtcgt	gaaggaagca	1440
gttcctctgg	aagcttcttg	aagacaaaac	acgtctgtag	cgaccctttg	caggcagcgg	1500

aacccccccac	ctggcgacag	gtgcctctgc	ggccaaaagc	cacgtgtata	agatacacct	1560
gcaaaggcgg	cacaacccca	gtgccacgtt	gtgagttgga	tagttgtgga	aagagtcaaa	1620
tggctctcct	caagcgtatt	caacaagggg	ctgaaggatg	cccagaagg	acccattgt	1680
atgggatctg	atctggggcc	tgggtgcaca	tgttttacat	gtgttttagtc	gagggttaaaa	1740
aacgtctagg	ccccccgaac	cacggggacg	tgtttttcct	ttqaaaaaca	cgataatacc	1800
atggcgcccta	ttacggccta	ctcccaacag	acgcgaggcc	tacttggtcg	catcatcact	1860
agcctcacag	gccgggacag	gaaccaggtc	gagggggagg	tccaagtgg	ctccaccgca	1920
acacaatctt	tcctggcgac	ctgcgtcaat	ggcgtgtgtt	ggactgtcta	tcattggtgcc	1980
ggctcaaaga	cccttgccgg	cccaaagggc	ccaatcaccc	aaatgtacac	caatgtggac	2040
caggacctcg	tcggctggca	agcgccccc	ggggcgcggt	ccttgacacc	atgcacctgc	2100
ggcagcgcg	acctttactt	ggtcacgagg	catgccgatg	tcattccggg	gcgcggcg	2160
ggcgacagca	gggggagcct	actctcccc	aggccggtt	cctacttgaa	gggctcttcg	2220
ggcgggtccac	tgtcttgccc	ctcggggcac	gctgtgggca	tctttcgggc	tgcgtgtgc	2280
acccgagggg	ttgcgaaggc	ggtggacttt	gtaccgctcg	agtctatggg	aaccactatg	2340
cggctccccg	tcttcacgga	caactcgtcc	cctccggccg	taccgcagac	attccagggtg	2400
gccccatctac	acgcccctac	tggtagcggc	aagagcacta	aggtgccggc	tgcgtatgca	2460
gcccgaagggt	ataagggtgt	tgtcctgaac	cgctccgtcg	ccgccaccct	aggtttcggg	2520
gcgtatatgt	ctaaggcaca	tggtagcgac	cctaactatca	gaaccgggg	aaggaccatc	2580
accacgggtg	cccccatcac	gtactccacc	tatggcaagt	ttcttgccga	cgggtggttgc	2640
tctggggggcg	cctatgacat	cataatatgt	gatgagtgcc	actcaactga	ctcgaccact	2700
atcctggggca	tcggcacagt	cctggaccaaa	gcggagacgg	ctggagcgcg	actcgtcgtg	2760
ctcgccaccg	ctacgcctcc	gggatcggtc	accgtgccac	atccaaacat	cgaggagggtg	2820
gctctgtcca	gcactggaga	aatccccctt	tatggcaaa	ccatccccat	cgagaccatc	2880
aagggggggga	ggcacctcat	tttctgccat	tccaagaaga	aatgtgatga	gctcgccg	2940
aagctgtccg	gcctcggact	caatgctgta	gcataattacc	ggggccttga	tgtatccgtc	3000
ataccaacta	gcggagacgt	cattgtcgta	gcaacggacg	ctctaattgac	gggctttacc	3060
ggcgatttctg	actcagtgat	cgactgcaat	acatgtgtca	cccagacagt	cgacttcagc	3120
ctggaccgga	ccttcaccat	tgagacgacg	accgtgccac	aagacgcgg	gtcacgctcg	3180
cagcgccgag	caggagctgg	taggggcagg	atgggcattt	acaggtttgt	gactccaggga	3240
gaacggccct	cgggcatggt	cgattcctcg	gttctgtgcg	agtgtatga	cgcgggctgt	3300
gcttggtacg	agctcacgcc	cgccgagacc	tcagttaggt	tgcgggctta	cctaaacaca	3360
ccagggttgc	ccgtctgcca	ggaccatctg	gagttctggg	agagcgtctt	tacaggcctc	3420
accacacatag	acgcccattt	cctgtcccag	actaagcagg	caggagacaa	cttcccctac	3480
ctggtagcat	acaggctac	ggtgtgcgcc	agggtcagg	ctccacctcc	atcgtgggac	3540
caaatgtgga	agtgctcat	acggctaaag	ctacgctgc	acgggccaac	gcccgtgctg	3600
tataggctgg	gagccgttca	aaacgaggtt	actaccacac	accccataac	caaatacatc	3660
atggcatgca	tgtcagctga	cctggaggtc	gtcacgagca	cctgggtgct	ggtaggcgga	3720
gtcctagcag	ctctggccgc	gtattgcctg	acaacaggca	gcgtggctcat	tgtgggcagg	3780
atcatcttgt	ccggaaagcc	ggccatcatt	cccagacagg	aagtctttta	ccgggagttc	3840
gatgagatgg	cagatgcg	ctcacacctc	cttcacatcg	aacggggaat	gcagctcgcc	3900
gaacatttca	aacagaaggc	aatcggttg	ctgcaaacag	ccaccaagca	agcggaggct	3960
gctgctcccg	cgggtggaatc	caagtggcgg	accctcgaag	ccttctgggc	gaagcatatg	4020
tgggaatttca	tcagcgggat	acaatattta	gcaggcttgt	ccactctgcc	tggcaacccc	4080
gcgatagcat	cactgatggc	attcacagcc	tctatcacca	gcccgtcac	cacccaacat	4140
accctcctgt	ttaacatcct	ggggggatgg	gtggccgccc	aacttgctcc	tcccagcgt	4200
gcttctgctt	tcgtaggcgc	cgcatcgtc	ggagcggctc	ttggcagcat	aggccttggg	4260
aagggtgctt	tggatatattt	ggcagggtat	ggagcggggg	tggcaggcgc	gctcgtggcc	4320
tttaagggtca	tgagcggcga	gatgccctcc	accgaggacc	tgggttaacct	actccctgct	4380
atcctctccc	ctggcgccct	agtctgcggg	gtcgtgtgcg	cagcgatact	gcgtcggcac	4440
gtggggcccag	gggagggggc	tgtgcagtgg	atgaaccggc	tgatagcgtt	cgcttcgcgg	4500
ggtaaccacg	tctccccac	gcactatgtg	cctgagagcg	acgtgcagc	acgtgtcact	4560
cagatcctct	ctagtcttac	catcactcag	ctgctgaaga	ggcttcacca	gtggatcaac	4620
gaggactgct	ccacgccatg	ctccggctcg	tggctaagag	atgtttggga	ttggatatgc	4680
acggtgttga	ctgatttcaa	gacctggctc	cagtccaagc	tcctgccgcg	attgccggga	4740
gtccccctct	tctcatgtca	acgtgggtac	aagggagctc	ggcggggcga	cggcatcatg	4800
caaaccacct	gcccattgtg	agcacagatc	accggacatg	tgaaaaacgg	ttccatgagg	4860
atcgtggggc	ctaggacctg	tagtaaacag	tggcatggaa	cattccccat	taacgcgtac	4920
accacggggc	cctgcacgcc	ctccccggcg	ccaaattatt	ctagggcgct	gtggcggggtg	4980
gctgctgagg	agtacgtgga	ggttacgcgg	gtgggggatt	tccactacgt	gacgggcatg	5040
accactgaca	acgtaaagtg	cccgtgtcag	gttccggccc	ccgaattctt	cacagaagtg	5100
gatgggggtg	ggttgacacag	gtacgctcca	gcgtgcaaac	ccctcctacg	ggaggagggtc	5160
acattccttg	tcgggctcaa	tcaatacctc	gttgggtcac	agctcccatg	cgagcccga	5220
cgggacgtga	cagtgctcac	ttccatgctc	accgacccct	cccacattac	ggcgagacg	5280
gctaagcgta	gggtggccag	gggatctccc	ccctccttgg	ccagctcatc	agctaccag	5340
ctgtctgcgc	cttccctgaa	ggcaacatgc	actaccgctc	atgactcccc	ggacgctgac	5400
ctcatcgagg	ccaacctcct	gtggcggcag	gagatggggc	ggaacatcac	ccgcgtggag	5460

tcagaaaata	aggtagtaat	tttggagtct	ttcgagccgc	tccaagcggg	ggaggatgag	5520
aggggaagtat	ccgttccggc	ggagatccctg	cggagggtcca	ggaaattccc	tcgagcgaatg	5580
cccatatggg	cacgcccggg	ttacaaccct	ccactgttag	agtcctggaa	ggacccggac	5640
tacgtccctc	cagtgggtaca	cgggtgtcca	ttgcccgcctg	ccaaggcccc	tccgatacca	5700
cctccacgga	ggaagaggac	ggttgtccctg	tcagaatcta	ccgtgtcttc	tgcccttggcg	5760
gagctcgcca	caaagacctt	cggcagctcc	gaatcgctcg	ccgtcgacag	cggcacggca	5820
acggcctctc	ctgaccagcc	ctccgacgac	ggcgacgcgg	gatccgacgt	tgagtcgtac	5880
tcctccatgc	cccccttga	gggggagccg	ggggatcccg	atctcagcga	cgggtcttgg	5940
tctaccgtaa	gcgaggaggc	tagtgaggac	gtcgtctgct	gctcgatgtc	ctacacatgg	6000
acaggcgccc	tgatcacgcc	atgcgctgcg	gaggaaacca	agctgcccat	caatgcaactg	6060
agcaactctt	tgctccgtca	ccacaacttg	gtctatgcta	caacatctcg	cagcgcaagc	6120
ctgcggcaga	agaaggctcac	ctttgacaga	ctgcaggctc	tggacgacca	ctaccgggac	6180
gtgctcaagg	agatgaaggc	gaaggcgtcc	acagttaagg	ctaaacttct	atccgtggag	6240
gaagcctgta	agctgacgcc	cccacattcg	gccagatcta	aatttggcta	tggggcaaag	6300
gacgtccgga	acctatccag	caaggccggt	aaccacatcc	gctccgtgtg	gaaggacttg	6360
ctggaagaca	ctgagacacc	aattgacacc	accatcatgg	caaaaaatga	ggttttctgc	6420
gtccaaccag	agaagggggg	cgcgaagcca	gctgcctta	tcgtattccc	agatttgggg	6480
gttcgtgtgt	gcgagaaaat	ggccctttac	gagtgtgtct	ccaccctccc	tcaggccgtg	6540
atgggctctt	catacggatt	ccaatactct	cctggacagc	gggtcgagtt	cctgggtgaat	6600
gcctggaaag	cgaagaaatg	ccctatgggc	ttcgcatatg	acaccgcgtg	ttttgactca	6660
acgggtcactg	agaatgacat	ccgtgttgag	gagtcaatct	accaatgttg	tgacttggcc	6720
cccgaagcca	gacaggccat	aaggctcgctc	acagagcgcc	tttacatcgg	gggccccctg	6780
actaattcta	aagggcagaa	ctgcggctat	cgccggtgcc	gcgcgagcgg	tgactctgacg	6840
accagctgcg	gtaataacct	cacatgttac	ttgaaggccg	ctgcggcctg	tcgagctgcg	6900
aagctccagg	actgcacgat	gctcgtatgc	ggagacgacc	ttgtcgttat	ctgtgaaagc	6960
gcggggaccc	aagaggacga	ggcgagccta	cgggccttca	cggaggctat	gactagatac	7020
tctgcccccc	ctggggaccc	gccc aaacca	gaatacgaat	tggagttgat	aacatcatgc	7080
tcctccaatg	tgctagtcgc	gcacgatgca	cttggcaaaa	gggtgtacta	tctcaccctg	7140
gaccccaacca	cccccttgc	gcgggctgcg	tgggagacag	ctagacacac	tccagctcaat	7200
tcctggctag	gcaacatcat	catgtatgcg	cccaccttgt	gggcaaggat	gatcctgatg	7260
actcatttct	tctccatcct	tctagctcag	gaacaacttg	aaaagccct	agattgtcag	7320
atctacgggg	cctgttactc	cattgagcca	cttgacctac	ctcagatcat	tcaacgactc	7380
catggcctta	gcgcattttc	actccatagt	tactctccag	gtgagatcaa	taggggtggct	7440
tcattgcctca	ggaaacttgg	ggtaccgcgc	ttgcgagtct	ggagacatcg	ggccagaagt	7500
gtccgcgcta	ggctactgtc	ccaggggggg	agggctgcca	cttgtggcaa	gtacctcttc	7560
aactgggcag	taaggaccaa	gctcaaactc	actccaatcc	cggctgcgtc	ccagttggat	7620
ttatccagct	ggttcgttgc	tggttacagc	gggggagaca	tatatcacag	cctgtctcgt	7680
gcccgaaccc	gctggttcat	gtggtgccta	ctcctacttt	ctgtaggggt	aggcatctat	7740
ctactcccca	accgatgaac	ggggaccta	acactccagg	ccaataggcc	atcctgtttt	7800
tttccctttt	tttttttctt	tttttttttt	tttttttttt	tttttttttt	ttctctcttt	7860
tttttccctc	ttttttcctt	ttctttcctt	tgggtggctcc	atcttagccc	tagtcacggc	7920
tagctgtgaa	aggctcgtga	gccgcttgac	tgcagagagt	gctgatactg	gcctctctgc	7980
agatcaagta	ctcctgcagg	cgcgccacta	gtgggaatac	gcgggggtatg	ccgcgtttta	8040
gcatattgac	gacccaattc	tcatgtttga	cagcttatca	tcgataagct	ttaatgcggt	8100
agtttatcac	agttaaattg	ctaacgcagt	caggcaccgt	gtatgaaatc	taacaatgcg	8160
ctcatcgta	tcctcggcac	cgtcacccctg	gatgtgtgag	gcataaggctt	gttatgtccg	8220
gtactgcccg	gcctcttgcg	ggatatcgctc	cattccgaca	gcacgcgcag	tcactatggc	8280
gtgctgctag	cgctatatgc	gttgatgcaa	tttctatgcg	caccgcgttct	cggagcactg	8340
tcgcagccgt	ttggccgcgcg	cccagtcctg	ctcgccttcgc	tacttggagc	cactatcgac	8400
tacgcgatca	tggcgaccac	acccgtcctg	tggatcctct	acgcgggacg	catcgtggcc	8460
ggcatcaccc	gcgcacacag	tgcggttgct	ggcgccctata	tcgcgcacat	caccgatggg	8520
gaagatcggg	ctcgccactt	cgggctcatg	agcgcttgtt	tcggcggtggg	tatggtggca	8580
ggccccgctg	ccgggggact	gttgggcgcg	atctccttgc	atgcaccatt	ccttgcggcg	8640
gcggtgctca	acggcctcaa	cctactactg	ggctgcttcc	taatgcagga	gtcgcataag	8700
ggagagcgtc	gaccgatgcc	cttgagagcc	ttcaaccacg	tcagctcctt	ccggtgggcg	8760
cggggcatga	ctatcgctcg	cgcacttatg	actgtcttct	ttatcatgca	actcgtagga	8820
caggtgccgg	cagcgtctcg	ggtcattttc	ggcgaggacc	gctttcgctg	gagcgcgacg	8880
atgatcgccg	tgctcgcttgc	ggtattcgga	atcttgcacg	ccctcgctca	agcctctcgt	8940
actgggtccc	ccaccaaacg	tttcggcgag	aagcaggcca	ttatcgccgg	catggcgggc	9000
gacgcgctgg	gctacgtctt	gctggcgctc	gcgacgcgag	gctggatggc	cttccccatt	9060
atgattcttc	tcgcttccgg	cggcatcggg	atgcccgcgt	tgcaggccat	gctgtccagg	9120
caggtagatg	acgaccatca	gggacagctt	caaggatcgc	tcgcggctct	taccagccta	9180
acttcgatca	ctggaccgct	gatcgctcac	gcgatttatg	ccgcctcgcc	gagcacatgg	9240
aacgggttgg	catggattgt	aggcgccgcc	ctataccttg	tctgcctccc	cgcgttgctg	9300
cgcggtgcat	ggagccgggg	cacctcgacc	tgaatggaag	ccggcggcac	ctcgctaacg	9360
gattcaccac	tccaagaatt	ggagccaatc	aattcttgcg	gagaactgtg	aatgcgcaaa	9420

ccaacccttg	gcagaacata	tccatcgcg	ccgccatctc	cagcagccgc	acgcggcgca	9480
tctcgggcag	cggtgggtcc	tggccacggg	tgcgcagat	cgtgctcctg	tcggtgagga	9540
cccggctagg	ctggcggggg	tgccttactg	gttagcagaa	tgaatcaccc	atacgcgagc	9600
gaacgtgaag	cgactgctgc	tgcaaaacgt	ctgcgacctg	agcaacaaca	tgaatgggtct	9660
tccggttccg	tgtttcgtaa	agtctggaaa	cgcggaaagt	aqcqcctgc	accattatgt	9720
tccggtatcg	catcgagga	tgctgctggc	tacctgtgg	aacacctaca	tctgtattaa	9780
cgaagcgctg	gcattgacct	tgagtgattt	ttctctggtc	ccgcgcgcat	cataccgcca	9840
gttggttacc	ctcacaacgt	tccagtaacc	gggcatgttc	atcatcagta	accggtatcg	9900
tgagcatcct	ctctcgtttc	atcgggtatca	ttacccccat	gaacagaaat	tcccccttac	9960
acggaggcat	caagtgaacca	aacaggaaaa	aaccgcccct	aacatggccc	gctttatcag	10020
aagccagaca	ttaacgcttc	tggagaaact	caacgagatg	gacgcggatg	aacaggcaga	10080
catctgtgaa	tccgcttcacg	accacgctga	tgagctttac	cgcagctgcc	tccgctgttt	10140
cgggtgatgac	gggtgaaaacc	tctgacacat	gcagctcccc	gagacgggtca	cagcttgtct	10200
gtaagcggat	gccggggagca	gacaagcccc	tcaggggcgc	tcagcgggtg	ttggcgggtg	10260
tccggggcgca	gccatgacct	agtcacgtag	cgatagcggg	gtgtatactg	gcttaactat	10320
gcggcatcag	agcagattgt	actgagagtg	caccatattg	ggtgtgaaat	accgcacaga	10380
tgcgtaagga	gaaaataccg	catcaggcgc	tcttcgcttc	cctcgctcac	tgactcgctg	10440
cgctcggctg	ttcggctgct	gcgagcggta	tcagctcact	caaaggcggg	aatacgggta	10500
tccacagaat	caggggataa	cgcaggaaag	aacatgtgag	caaaaggcca	gcaaaaggcc	10560
aggaaccgta	aaaaggccgc	gttgctggcg	ttttcccata	ggctccgccc	ccctgacgag	10620
catcacaaaa	atcgacgctc	aagtcagagg	tggcgaaacc	cgacaggact	ataaagatac	10680
caggcggttt	ccccctggaag	ctccctcgct	cgtctcctg	ttccgaccct	gcccgttacc	10740
ggatacctgt	ccgcctttct	cccttcggga	agcgtggcgc	tttctcatag	ctcacgctgt	10800
aggtatctca	gttcgggtgta	ggtcgttcgc	tccaagctgg	gctgtgtgca	cgaaccccc	10860
gttcagcccg	accgctgcgc	cttatccggt	aactatcgct	ttgagtccaa	cccggtaaga	10920
cacgacttat	cgccactggc	agcagccact	ggtaacagga	ttagcagagc	gagggtatgta	10980
ggcgggtgcta	cagagttcct	gaagtgggtg	cctaactacg	gctacactag	aaggacagta	11040
tttggtatct	gcgctctgct	gaagccagtt	accttcggaa	aaagagttgg	tagctcttga	11100
tccggcaaac	aaaccaccgc	tggtagcggt	ggtttttttg	tttgcaagca	gcagattacg	11160
cgcagaaaaa	aaggatctca	agaagatcct	ttgatctttt	ctacgggggtc	tgacgctcag	11220
tggaacgaaa	actcacgtta	agggattttg	gtcatgagat	tatcaaaaag	gatcttcacc	11280
tagatccttt	tctagataat	acgactcact	ata			11313

<210> 5

<211> 11313

<212> DNA

<213> Artificial Sequence

<220>

<223> Plasmid

<400> 5

gccagccccc	gattgggggg	gacactccac	catagatcac	tcccctgtga	ggaactactg	60
tcttcacgca	gaaagcgtct	agccatggcg	ttagtatgag	tgctgtgcag	cctccaggac	120
ccccctccc	gggagagcca	tagtggtctg	cggaaaccgg	gagtagaccg	gaattgccag	180
gacgaccggg	tcctttcttg	gatcaaccgc	ctcaatgcct	ggagatttgg	gcgtgcccc	240
gcgagactgc	tagccgagta	gtgttggtgc	gcgaaaggcc	ttgtgggtact	gcctgatagg	300
gtgcttgcca	gtgccccggg	aggtctcgta	gaccgtgcac	catgagcacg	aatcctaacc	360
ctcaaagaaa	aaccaaaggg	cgcgccatga	ttgaacaaga	tggtattgcac	gcaggttctc	420
cggccgcttg	ggtggagagg	ctattcggct	atgactgggc	acaacagaca	atcggctgct	480
ctgatgccgc	cgtgttcggg	ctgtcagcgc	agggggcgcc	ggttcttttt	gtcaagaccg	540
acctgtccgg	tgccctgaat	gaactgcagg	acgaggcagc	gcggctatcg	tggttgccca	600
cgacggggcg	tccttgcgca	gctgtgctcg	acgttgtcac	tgaagcggga	agggactggc	660
tgctattggg	cgaagtgcgc	gggcaggatc	tcctgtcacc	tcaccttgct	cctgcccaga	720
aagtatccat	catggctgat	gcaatgcggc	ggctgcatac	gcttgatccg	gctacctgcc	780
cattcgacca	ccaagcgaaa	catcgcatcg	agcgagcacg	tactcggatg	gaagccgggtc	840
ttgtcgatca	ggatgatctg	gacgaagagc	atcagggggt	cgcgccagcc	gaactgttcg	900
ccaggctcaa	ggcgcgcatg	cccagcggcg	aggatctcgt	cgtgacccat	ggcgatgcct	960
gcttgccgaa	tatcatgggtg	gaaaatggcc	gctttttctg	attcatcgac	tgtggccggc	1020
tgggtgtggc	ggaccgctat	caggacatag	cgttggttac	ccgtgatatt	gctgaagagc	1080
ttggcggcga	atggctgac	cgttctctcg	tgctttacgg	tatcgccgct	cccgtctcgc	1140
agcgcatcgc	cttctatcgc	cttcttgacg	agttcttctg	agtttaaaca	gaccacaacg	1200
gtttccctct	agcgggatca	attccgcccc	tctccctccc	ccccccctaa	cgttactggc	1260
cgaagccgct	tgggaataag	ccgggtgtgcg	tttgtctata	tggtattttc	caccatattg	1320

ccgtctttt	gcaatgtgag	ggcccggaaa	cctggccctg	tcttcttgac	gagcattcct	1380
aggggtcttt	ccccctctgc	caaaggaatg	caaggtctgt	tgaatgtcgt	gaaggaagca	1440
gttcctctgg	aagcttcttg	aagacaaaaca	acgtctgtag	cgaccctttg	caggcagcgg	1500
aacccccac	ctggcgacag	gtgcctctgc	ggccaaaagc	cacgtgtata	agatacacct	1560
gcaaaggcgg	cacaacccca	gtgccacgtt	gtgaattgga	taqttgtgga	aagagtcaaa	1620
tggctctcct	caagcgtatt	caacaagggg	ctgaaggatg	cccagaagg	acccattgt	1680
atgggatctg	atctggggcc	tcggtgcaca	tgctttacat	gtgttttagtc	gaggttaaaa	1740
aacgtctagg	ccccccgaac	cacggggacg	tggttttctt	ttgaaaaaca	cgataatacc	1800
atggcgcccta	ttacggcccta	ctcccaacag	acgcgaggcc	tacttggctg	catcatcact	1860
agcctcacag	gcccgggacag	gaaccagggtc	gagggggagg	tccaagtgg	ctccaccgca	1920
acacaatctt	tccctggcgac	ctgcgtcaat	ggcgtgtgtt	ggactgtcta	tcatggtgcc	1980
ggctcaaaga	cccttgccgg	cccaaagggc	ccaatcaccc	aaatgtacac	caatgtggac	2040
caggacctcg	tcggctggca	agcgccccc	ggggcgcggt	ccttgacacc	atgcacctgc	2100
ggcagctcgg	acctttactt	ggtcacgagg	catgccgatg	tcattccgg	gcgcggcg	2160
ggcgacagca	ggggggagcct	actctcccc	aggcccgtct	cctacttgaa	gggctcttcg	2220
ggcgggtccac	tgccttgccc	ctcggggcac	gctgtggggc	tctttcgggc	tgccgtgtgc	2280
acccgagggc	tgcgaaggc	ggtggacttt	gtaccgtgcg	agtctatggg	aaccactatg	2340
cggctccccg	tcttgccgga	caactcgtcc	ctcccgccg	taccgcagac	attccagggtg	2400
gcccattctac	acgcccctac	tggtagcggc	aagagcacta	aggtgccggc	tgctatgca	2460
gccaagggt	ataagggtgct	tgctcctgaac	ccgtccgtcg	ccgccaccct	aggtttcggg	2520
gcgtatatgt	ctaaggcaca	tggtatcgac	cctaaccatca	gaaccgggg	aaggaccatc	2580
accacgggtg	cccccatcac	gtactccacc	tatggcaagt	ttcttgccga	cgggtggttc	2640
tctggggggc	cctatgacat	cataatatgt	gatgagtgc	actcaactga	ctcgaccact	2700
atcctgggca	tcggcacagt	cctggacca	gcggagacgg	ctggagcgcg	actcgtcgtg	2760
ctcgccaccg	ctacgcctcc	gggatcgggtc	accgtgccac	atccaaacat	cgaggagggtg	2820
gctctgtcca	gcactggaga	aatccccctt	tatggcaaag	ccatccccat	cgagaccatc	2880
aaggggggga	ggcacctcat	tttctgccat	tccaagaaga	aatgtgatga	gctcgccg	2940
aagctgtccg	gcctcggact	caatgctgta	gcatattacc	ggggccttga	tgtatccgtc	3000
ataccaacta	cgggagacgt	cattgtcgta	gcaacggacg	ctctaattgac	gggctttacc	3060
ggcgatttctg	actcagtgat	cgactgcaat	acatgtgtca	cccagacagt	cgacttcagc	3120
ctggaccgga	ccttcaccat	tgagacgacg	accgtgccac	aagacgcggt	gtcacgctcg	3180
cagcggcgag	gcaggactgg	taggggcagg	atgggcattt	acaggtttgt	gactccagga	3240
gaacggccct	cgggcatggt	cgattcctcg	gttctgtg	agtgtatga	cgcgggctgt	3300
gcttggtagc	agctcacgcc	cgccgagacc	tcagttagg	tgcgggctta	cctaaacaca	3360
ccagggttgc	ccgtctgcca	ggaccatctg	gagttctggg	agagcgtctt	tacaggcctc	3420
accacatag	acgcccattt	cttgtcccag	actaagcagg	caggagacaa	cttcccctac	3480
ctggtagcat	accaggctac	ggtgtgcgcc	agggctcagg	ctccacctcc	atcgtgggac	3540
caaagtgtgga	agtgtctcat	acggctaag	cctacgctgc	acggggccaac	gcccctgctg	3600
tataggctgg	gagccgttca	aaacgaggtt	actaccacac	accccataac	caaatacatc	3660
atggcatgca	tgtcagctga	cctggaggtc	gtcacgagca	cctgggtgct	ggtaggcgga	3720
gtccatagcag	ctctggccgc	gtattgcctg	acaacaggca	gcgtgggtcat	tgtgggcagg	3780
atcatcttgt	ccggaaagcc	ggccatcatt	cccagacagg	aagtctttta	ccgggagttc	3840
gatgagatgg	aagagtgcgc	ctcacacctc	ccttacatcg	aacggggaat	gcagctcgcc	3900
gaacatttca	aacagaaggc	aatcgggttg	ctgcaaacag	ccaccaagca	agcggagggt	3960
gctgctcccg	cgggtggaatc	caagtggcgg	accctcgaag	ccttctgggc	gaagcatatg	4020
tggaaattca	tcagcgggat	acaatattta	gcaggcttgt	ccactctgcc	tggcaacccc	4080
gcgatattgc	cactgatggc	attcacagcc	ttctatacca	gcccgtctac	cacccaacat	4140
accctcctgt	ttaacatcct	gggggggatgg	gtggccgccc	aacttgctcc	ttccagcgct	4200
gcttctgctt	tcgtaggcgc	cggcatcgct	ggagcggctg	ttggcagcat	aggccttggg	4260
aagggtgctt	tggatatttt	ggcaggttat	ggagcagggg	tggcagggcg	gctcgtggcc	4320
tttaagggtca	tgagcggcga	gatgccctcc	accgaggacc	tggttaacct	actccctgct	4380
atcctctccc	ctggcgccct	agtcgtcggg	gtcgtgtg	cagcgatact	cgctcggcac	4440
gtgggcccag	gggagggggc	tgtgcagtg	atgaaccggc	tgatagcgtt	cgcttcg	4500
ggtaaccacg	tctccccac	gcactatgtg	cctgagagcg	acgctgcagc	acgtgtcact	4560
cagatcctct	ctagtcttac	catcactcag	ctgctgaaga	ggcttcacca	gtggatcaac	4620
gaggactgct	ccacgccatg	ctccggctcg	tggttaagag	atgtttggga	ttggatatgc	4680
acgggtgtga	ctgatttcaa	gacctggctc	cagtcacaagc	tcctgcccgc	attgcccggga	4740
gtccccttct	tctcatgtca	acgtgggtac	aaggaggtct	ggcgggcgga	cgccatcatg	4800
caaaccacct	gcccattgtg	agcacagatc	accggacatg	tgaaaaacgg	ttccatgagg	4860
atcgtggggc	ctaggacctg	tagtaacacg	tggcatggaa	cattccccat	taacgcgtac	4920
accacggggc	cctgcacgcc	ctccccggcg	ccaaattatt	ctagggcgct	gtggcgggtg	4980
gctgctgagg	agtacgtgga	ggttacgcgg	gtgggggatt	tccactacgt	gacgggcatg	5040
accactgaca	acgttaagtg	cccggtgcag	gttcggcccc	ccgaattctt	cacagaagtg	5100
gatgggggtg	gggtgcacag	gtacgctcca	cgctgcaaac	ccctcctacg	ggaggaggtc	5160
acattcctgg	tcgggctcaa	tcaatacctg	ggtgggtcac	agctcccatg	cgagcccgaa	5220
ccggacgtag	cagtgtcac	ttccatgctc	accgaccctc	cccacattac	ggcggagacg	5280

gctaagcgta	ggctggccag	gggatctccc	ccctccctgg	ccagctcacc	agctatccag	5340
ctgtctgcgc	cttccttgaa	ggcaacatgc	actacccgctc	atgactcccc	ggacgctgac	5400
ctcatcgagg	ccaacctoct	gtggcggcag	gagatgggag	ggaacatcac	ccgcgtggag	5460
tcagaaaata	aggtagtaat	tttgaggtct	ttcgagccgc	tccaagcgga	ggaggatgag	5520
agggaaagtat	ccgttccggc	ggagatcctg	cggaggtcca	ggaaattccc	tcgaacgatg	5580
cccatatggg	cacgcccggg	ttacaacctt	ccactgttag	agtcctggaa	ggacccggac	5640
tacgtccctc	cagtgggtaca	cgggtgtcca	ttgcgcctg	ccaaggcccc	tccgatacca	5700
cctccacgga	ggaagaggac	ggttgtcctg	tcagaatcta	ccgtgtcttc	tgccttggcg	5760
gagctcgcca	caaagacctt	cggcagctcc	gaatcgctcg	ccgtcgacag	cggcacggca	5820
acggcctctc	ctgaccagcc	ctccgacgac	ggcgacgcgg	gatccgacgt	tgagtcgtac	5880
tcctccatgc	cccccttga	gggggagccg	ggggatcccc	atctcagcga	cgggtcttgg	5940
tctaccgtaa	gcgaggaggc	tagtgaggac	ctcgtctgct	gctcgatgtc	ctacacatgg	6000
acaggcgccc	tgatcacgcc	atgcgctgcg	gaggaaacca	agctgccccat	caatgcactg	6060
agcaactctt	tgctccgtca	ccacaacttg	gtctatgcta	caacatctcg	cagcgcaagc	6120
ctgcggcaga	agaaggtcac	ctttgacaga	ctgcagggtcc	tggacgacca	ctaccggggac	6180
gtgctacgga	agatgaaggc	gaaggcgctcc	acagttaagg	ctaaacttct	atccgtggag	6240
gaagcctgta	agctgacgcc	cccacattcg	gccagatcta	aatttggcta	tggggcaaaag	6300
gacgtccgga	acctatccag	caaggccgtt	aaccacatcc	gctccgtgtg	gaaggacttg	6360
ctggaagaca	ctgagacacc	aattgacacc	accatcatgg	caaaaaatga	ggttttctgc	6420
gtccaaccag	agaagggggg	ccgcaagcca	gctcgcccta	tcgtattccc	agatttgggg	6480
gttcgtgtgt	gcgagaaaaat	ggccctttac	gatgtggtct	ccaccctccc	tcaggccgtg	6540
atgggctctt	catacggatt	ccaatactct	cctggacagc	gggtcgagtt	cctgggtgaat	6600
gcttgaaaag	cgaagaaatg	ccctatgggc	ttcgcatatg	acaccgctg	ttttgactca	6660
acgggtcactg	agaatgacat	ccgtgttgag	gagtcaatct	accaatgttg	tgacttggcc	6720
cccgaagcca	gacaggccat	aaggctcgctc	acagagcggc	tttacatcgg	gggccccctg	6780
actaattcta	aagggcagaa	ctgcggtctat	cgccggtgcc	gcgcgagcgg	tgtactgacg	6840
accagctgcg	gtaataccct	cacatgttac	ttgaaggccg	ctgcggcctg	tcgagctgcg	6900
aagctccagg	actgcacgat	gctcgtatgc	ggagacgacc	ttgtcgttat	ctgtgaaagc	6960
gcggggacc	aagaggacga	ggcgagccta	cgggccttca	cggaggctat	gactagatac	7020
tctgcccccc	ctggggaccc	gccccaaacca	gaatacgact	tggagttgat	aacatcatgc	7080
tcctccaatg	tgtcagtcgc	gcacgatgca	tctggcaaaa	gggtgtacta	tctcaccctg	7140
gacccccacca	cccccttgc	gcgggtctgcg	tgggagacag	ctagacacac	tccagtcaat	7200
tcttggttag	gcaacatcat	catgtatgcg	cccaccttgt	gggcaaggat	gatacctgatg	7260
actcatttct	tctccatcct	tctagctcag	gaacaacttg	aaaaagccct	agattgtcag	7320
atctacgggg	cctgttactc	cattgagcca	cttgacctac	ctcagatcat	tcaacgactc	7380
catggcctta	gcgcattttc	actccatagt	tactctccag	gtgagatcaa	taggggtggct	7440
tcatgcctca	ggaaacttgg	ggtaccgccc	ttgcgagctc	ggagacatcg	ggccagaagt	7500
gtccgcgcta	ggctactgtc	ccaggggggg	agggctgcca	cttgtggcaa	gtacctcttc	7560
aatggggcag	taaggaccaa	gctcaaactc	actccaatcc	cggctgcgtc	ccagttggat	7620
ttatccagct	tggttcgttg	tggttacagc	ggggagacac	tatatcacag	ctgtctcgt	7680
gccccgaccc	gctggttcat	gtggtgccta	ctcctacttt	ctgtaggggt	aggcatctat	7740
ctactcccca	accgatgaac	ggggaccta	acactccagg	ccaataggcc	atcctgtttt	7800
tttccctttt	tttttttctt	tttttttttt	tttttttttt	tttttttttt	ttctcctttt	7860
tttttctctt	ttttttcctt	ttctttcctt	tggtggctcc	atcttagccc	tagtcacggc	7920
tagctgtgaa	aggctcgtga	gocgcttgac	tgagagagat	gctgatactg	gctctcttgc	7980
agatcaagta	ctctcgagg	cgcccaacta	gtgggaatag	gcggggtag	ccgcctttta	8040
gcatattgac	gacccaattc	tcattgttga	cagcttatca	tcgataagct	ttaatgcggt	8100
agtttatcac	agttaaattg	ctaacgcagt	caggcaccgt	gtatgaaatc	taacaatgcg	8160
ctcatcgtea	tcctcggcac	cgtcaccctg	gatgctgtag	gcataggctt	ggttatgccg	8220
gtactgccgg	gcctcttgcg	ggatatcgte	cattccgaca	gcatcgccag	tcactatggc	8280
gtgctgctag	cgctatatgc	ggtgatgcaa	tttctatgcg	caccgcttct	oggagcactg	8340
tcgaccgct	ttggccgcgg	cccagtcctg	ctcgcttcgc	tacttggagc	cactatcgac	8400
tacgcgatca	tggcgaccac	accgctcctg	tggatcctct	acgccggacg	catcgtggcc	8460
ggcatcaccg	gcgccacagg	tgcggttgct	ggcgccata	tcgccgacat	caccgatggg	8520
gaagatcggg	ctcgccaactt	cgggctcatg	agcgcttggt	tcggcggtgg	tatgggtggca	8580
ggccccgttg	ccgggggact	ggtggggcgc	atctccttgc	atgcaccatt	ccttgccggc	8640
gcggtgctca	acggcctcaa	cctactactg	ggctgcttcc	taatgcagga	gtcgcatgaag	8700
ggagagcgte	gaccgatgcc	cttgagagcc	ttcaacccag	tcagctcctt	ccggtggggc	8760
cggggcatga	ctatcgtcgc	cgcacttatg	actgtcttct	ttatcatgca	actcgttagga	8820
caggtgcggg	cagcgctctg	ggtcattttc	ggcgaggacc	gctttcgctg	gagcgcgacg	8880
atgatcgccc	tgtcgcttgc	ggtattcgga	atcttgcacg	ccctcgctca	agccttcgctc	8940
actggtcccg	ccaccaaacg	tttcggcgag	aagcaggcca	ttatcgccgg	catggcgggc	9000
gacgcgctgg	gactacgctt	gctggcgctt	cgacgcgag	gctggatggc	cttccccatt	9060
atgattcttc	tcgcttccgg	cggcatcggg	atgcccgctg	tcgaggccat	gctgtccagg	9120
caggtagatg	acgaccatca	gggacagctt	caaggatcgc	tcgcggtctt	taccagccta	9180
acttcgatca	ctggaccgct	gatcgteacg	gcgatttatg	ccgcctcgge	gagcacatgg	9240

aacgggttg	catggattgt	aggcgccgcc	ctataccttg	tctgcctccc	cgcgttgctg	9300
cgcggtgcat	ggagccgggc	cacctcgacc	tgaatggaag	ccggcgccac	ctcgctaacg	9360
gattcaccac	tccaagaatt	ggagccaatc	aattcttgcg	gagaactgtg	aatgcgcaaa	9420
ccaacccttg	gcagaacata	tccatcgctg	ccgccatctc	cagcagccgc	acgcggcgca	9480
tctcgggcag	cgttgggtcc	tggccacggg	tgcgcatgat	cgtgctcctg	tcggtgagga	9540
cccggctagg	ctggcggggt	tgcttactg	gttagcagaa	tgaatcaccg	atacgcgagc	9600
gaacgtgaag	cgactgctgc	tgcaaaacgt	ctgcgacctg	agcaacaaca	tgaatgggtct	9660
tccggtttccg	tgtttcgtaa	agtctggaaa	cgcggaagtc	agcgccctgc	accattatgt	9720
tccggatctg	catcgcgagga	tgctgctggc	taccctgtgg	aacacctaca	tctgtattaa	9780
cgaagcgctg	gcattgaccc	tgagtgattt	ttctctgggtc	ccgccgcatac	cataccgcca	9840
gttggtttacc	ctcacaacgt	tccagtaacc	gggcatgttc	atcatcagta	accgctatcg	9900
tgagcatcct	ctctcgtttc	atcggtatca	ttaccccat	gaacagaaat	tcccccttac	9960
acggaggcat	caagtgaacca	aacaggaaaa	aaccgccctt	aacatggccc	gctttatcag	10020
aagccagaca	ttaacgcttc	tgagaaaact	caacgagctg	gacgcggatg	aacaggcaga	10080
catctgtgaa	tcgcttcacg	accacgctga	tgagctttac	cgcagctgcc	tgcgcgcttt	10140
cgggtgatgac	ggtgaaaaacc	tctgacacat	gcagctcccc	gagacggtca	cagcttgtct	10200
gtaagcggat	gccgggagca	gacaagcccg	tcaggcgcg	tcagcgggtg	ttggcgggtg	10260
tccggggcgca	gccatgaccc	agtcacgtag	cgatagcgga	gtgtatactg	gcttaactat	10320
gcggcatcag	agcagattgt	actgagagtg	caccatattg	ggtgtgaaat	accgcacaga	10380
tgcgtaagga	gaaaataccg	catcaggcgc	tcttcgcgtt	cctcgctcac	tgactcgctg	10440
cgctcggtcg	ttcggctgcg	gcgagcggta	tcagctcact	caaaggcggt	aatacgggtta	10500
tccacagaat	caggggataa	cgcaggaaa	aacatgtgag	caaaaggcca	gcaaaaggcc	10560
aggaaccgta	aaaaggccgc	gttgctggcg	tttttccata	ggctccgccc	ccctgacgag	10620
catcacaaaa	atcgacgctc	aagtcaagg	tggcgaaacc	cgacaggact	ataaagatac	10680
caggcgtttc	cccctggaag	ctccctcgctg	cgctctcctg	ttccgaccct	gccgcttacc	10740
ggatacctgt	ccgcctttct	cccttcggga	agcgtggcgc	tttctcatag	ctcacgctgt	10800
aggtatctca	gttcgggtgta	ggtcgttcgc	tccaagctgg	gctgtgtgca	cgaaccccc	10860
gttcagcccg	accgctgcgc	cttatccggt	aactatcgct	ttgagtccaa	cccggtaaga	10920
cacgacttat	cgccactggc	agcagccact	ggtaacagga	ttagcagagc	gaggtatgta	10980
ggcggtgcta	cagagttctt	gaagtgggtg	cctaactacg	gctacactag	aaggacagta	11040
tttggtatct	gcgctctgct	gaagccagtt	accttcggaa	aaagagttgg	tagctcttga	11100
tccggcaaac	aaaccaccgc	tggtagcgg	ggtttttttg	tttgcaagca	gcagattacg	11160
cgcagaaaaa	aaggatctca	agaagatcct	ttgatctttt	ctacgggggtc	tgacgctcag	11220
tggaaacgaaa	actcacgtta	agggattttg	gtcatgagat	tatcaaaaag	gatcttcacc	11280
tagatccttt	tctagataat	acgactcact	ata			11313

<210> 6
 <211> 11313
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Plasmid

<400> 6						
gccagccccc	gattggggggc	gacactccac	catagatcac	tcccctgtga	ggaactactg	60
tcttcacgca	gaaagcgtct	agccatggcg	ttagtatgag	tgctcgtcag	cctccaggac	120
ccccctccc	gggagagcca	tagtggtctg	cggaaccggt	gagtacaccg	gaattgccag	180
gacgaccggg	tcctttcttg	gatcaaccgc	ctcaatgcct	ggagatttgg	gcgtgcccc	240
gcgagactgc	tagccgagta	gtgttggtgc	gcgaaaggcc	ttgtgggtact	gcctgatagg	300
gtgcttgcca	gtgccccggg	aggtctcgta	gaccgtgcac	catgagcacg	aatcctaaac	360
ctcaaagaaa	aaccaaaagg	cgcgccatga	ttgaacaaga	tggattgcac	gcaggttctc	420
cggccgcttg	ggtggagagg	ctattcggct	atgactgggc	acaacagaca	atcggctgct	480
ctgatgccgc	cgtgttcggg	ctgtcagcgc	aggggcgccc	ggttcttttt	gtcaagaccg	540
acctgtccgg	tgccctgaat	gaactgcagg	acgaggcagc	gcggctatcg	tgggtggcca	600
cgacggggcg	tccctgcgca	gctgtgctcg	acgttgctac	tgaagcggga	agggactggc	660
tgctattggg	cgaagtgcgc	gggcaggatc	tcctgtcacc	tcaccttgct	cctgccgaga	720
aagtatccat	catggctgat	gcaatgcggc	ggctgcatac	gcttgatccg	gctacctgcc	780
cattcgacca	ccaagcgaaa	catcgcatcg	agcagcacag	tactcggatg	gaagccgggtc	840
ttgtcgatca	ggatgatctg	gacgaagagc	atcagggggt	cgcgccagcc	gaactgttcg	900
ccaggctcaa	ggcgcgcatg	cccagcggcg	aggtatctcg	cgtgacccat	ggcgtgacct	960
gcttgccgaa	tatcatgggtg	gaaaatggcc	cgttttctgg	attcatcgac	tgtggccggc	1020
tgggtgtggc	ggaccgctat	caggacatag	cgttggctac	ccgtgatatt	gctgaagagc	1080
ttggcggcga	atgggctgac	cgcttcctcg	tgctttacgg	tatcgccgct	cccgatccgc	1140

agcgcatcgc	cttctatcgc	cttcttgacg	agttcttctg	agtttaaaca	gaccacaacg	1200
gtttccctct	agcgggatca	attccgcccc	tctccctccc	ccccccctaa	cgttactggc	1260
cgaagccgct	tggaataagg	ccgggtgtgcg	tttgtctata	tgttattttc	caccatattg	1320
ccgtcttttg	gcaatgtgag	ggccccgaaa	cctggccctg	tcttcttgac	gagcattcct	1380
aagggctctt	ccccctctgc	caaaaggaatg	caaggtctgt	tqaatgtcgt	gaaggaagca	1440
gttctctcgg	aagcttcttg	aagacaaaca	acgtctgtag	cgaccctttg	caggcagcgg	1500
aaccccccac	ctggcgacag	gtgcctctgc	ggccaaaagc	cacgtgtata	agatacacct	1560
gcaaaggcgg	cacaacccca	gtgccacgtt	gtgagttgga	tagttgtgga	aagagtcaaa	1620
tggctctcct	caagcgtatt	caacaagggg	ctgaaggatg	cccagaagg	accccatgtg	1680
atgggatctg	atctggggcc	tccgtgcaca	tgctttacat	gtgttttagtc	gaggttaaaa	1740
aacgtctagg	ccccccgaac	cacgggggag	tggttttcct	ttgaaaaaca	cgataatacc	1800
atggcgccca	ttacggccca	ctcccaacag	acgcgaggcc	tacttggctg	catcatcact	1860
agcctcacag	gccgggacag	gaaccaggtc	gagggggagg	tccaagtgg	ctccaccgca	1920
acacaatctt	tcttggcgac	ctgcgtcaat	ggcgtgtgtt	ggactgtcta	tcatggtgcc	1980
ggctcaaaga	cccttgccgg	cccaaagggc	ccaatcaccc	aaatgtacac	caatgtggac	2040
caggacctcg	tccgctggca	agcgcctccc	ggggcgcggt	ccttgacacc	atgcacctgc	2100
ggcagcgcgg	acctttactt	ggtcacgag	catgccgatg	tcattccggt	gcgcggcgg	2160
ggcgacagca	gggggagcct	actctcccc	agggccgttt	cctacttgaa	gggctcttcg	2220
ggcgggtccac	tgtctgccc	ctcggggcac	gctgtgggca	tctttcgggc	tgcggtgtgc	2280
acccgagggg	ttgcgaaggc	ggtggacttt	gtaccctgcg	agtctatggg	aaccactatg	2340
cggctccccg	tcttcacgga	caactcgtcc	cctccggccg	taccgcagac	attccagggtg	2400
gccccatctac	acgccccctac	tggtagcgcg	aagagcacta	aggtgccggc	tgcgtatgca	2460
gcccaggggg	ataagggtgct	tgtcctgaac	ccgtccgtcg	ccgccaccct	aggtttcggg	2520
gcgtatatgt	ctaaggcaca	tggtagcgac	cctaaccatca	gaaccggggg	aaggaccatc	2580
accacgggtg	cccccatcac	gtactccacc	tatggcaagt	ttcttgccga	cgggtggttg	2640
tctggggggc	cctatgacat	cataatatgt	gatgagtgcc	actcaactga	ctcgaccact	2700
atcctgggca	tccggcacagt	cctggaccaa	gcggagacgg	ctggagcgcg	actcgtcgtg	2760
ctcgcaccgc	ctacgcctcc	gggatcggtc	accgtgccac	atccaaacat	cgaggagggtg	2820
gctctgtcca	gcactggaga	aatccccctt	tatggcaaa	ccatccccat	cgagaccatc	2880
aaggggggga	ggcacctcat	tttctgccat	tccaagaaga	aatgtgatga	gctcgccgcg	2940
aagctgtccg	gcctcggact	caatgctgta	gcatattacc	ggggccttga	tgtatccgtc	3000
ataccaacta	gcgggagcgt	cattgtcgtg	gcaacggacg	ctctaattgac	gggctttacc	3060
ggcgatttcg	actcagtgat	cgactgcaat	acatgtgtca	cccagacagt	cgacttcagc	3120
ctggacccga	ccttcaccat	tgagacgacg	accgtgccac	aagacgcggg	gtcacctcgc	3180
cagcggcgag	cgaggactgg	taggggcagg	atgggcattt	acaggtttgt	cagaccagga	3240
gaacggccct	cgggcatggt	cgattcctcg	gttctgtgcg	agtgtctatga	cgcgggctgt	3300
gcttggtacg	agctcacgcc	cgccgagacc	tcagttaggt	tgcgggctta	cctaaacaca	3360
ccagggttgc	ccgtctgcca	ggaccatctg	gagttctggg	agagcgtcct	tacaggcctc	3420
acccacatag	acgcccattt	cttgtcccag	actaagcagg	caggagacaa	cttcccctac	3480
ctggtagcat	accaggctac	ggtgtgcgcc	agggctcagg	ctccacctcc	atcgtgggac	3540
caaatgtgga	agtgctcat	acggctaagg	cctacgtcgc	acgggccaac	gcccctgctg	3600
tataggctgg	gagccgttca	aaacgaggtt	actaccacac	accccataac	caaatacatc	3660
atggcatgca	tgtcagctga	cctggaggtc	gtcacgagca	cctgggtgct	ggtaggcgga	3720
gtcctagcag	ctctggccgc	gtattgcctg	acaacaggca	gcgtggctcat	tgtgggcagg	3780
atcatcttgt	ccggaaagcc	ggccatcatt	cccagacagg	aagtctttta	ccgggagttc	3840
gatgagatgg	aagagtgcgc	ctcacacctc	ccttacatcg	aacgggggaat	cgcgctcgcc	3900
gaacatttca	aacagaaggc	aatcgggttg	ctgcaaacag	ccaccaagca	agcggaggct	3960
gctgctcccg	cgggtggaatc	caagtggcgg	accctcgaag	ccttctgggc	gaagcatatg	4020
tggaaatttca	tcagcgggat	acaatattta	gcaggcttgt	ccactctgcc	tggcaacccc	4080
gcgatagcat	cactgatggc	attcacagcc	tctatcacca	gcccgtcac	cacccaacat	4140
accctcctgt	ttaacatcct	ggggggatgg	gtggccgccc	aacttgctcc	tcccagcgtc	4200
gcttctgctt	tcgtaggcgc	cggcatcgct	ggagcggctg	ttggcagcat	aggccttggg	4260
aaggtgcttg	tggatatctt	ggcaggttat	ggagcagggg	tggcaggcgc	gctcgtggcc	4320
tttaagggtca	tgagcggcga	gatgccctcc	accgaggacc	tggttaacct	actccctgct	4380
atcctctccc	ctggcgccct	agtcgtcggg	gtcgtgtgcg	cagcgatact	gcgtcggcac	4440
gtggggcccag	gggagggggc	tgtgcagtgg	atgaaccggc	tgatagcggt	cgcttcgcgg	4500
ggtaaccacg	tctccccac	gcactatgtg	cctgagagcg	acgctgcagc	acgtgtcact	4560
cagatccctc	ctagtcttac	catcactcag	ctgctgaaga	ggcttcacca	gtggatcaac	4620
gaggactgct	ccacgccatg	ctccggctcg	tggctaagag	atgtttggga	ttggatatgc	4680
acgggtgttg	ctgatttcaa	gacctggctc	cagtcceaag	tccctgccgcg	attgccggga	4740
gtcccccttct	tctcatgtca	acgtgggtac	aagggagtct	ggcggggcga	cggcatcatg	4800
caaaccacat	gccccatgtg	agcacagatc	accggacatg	tgaaaaacgg	ttccatgagg	4860
atcgtggggc	ctaggacctg	tagtaaacac	tggcatggaa	cattccccat	taacgcgtac	4920
accacggggc	cctgcacgcc	ctccccggcg	ccaaattatt	ctagggcgct	gtggcgggtg	4980
gctgctgagg	agtacgtgga	ggttacgcgg	gtgggggatt	tccactacgt	gacgggcatg	5040
accactgaca	acgtaaaagt	cccgtgtcag	gttccggccc	ccgaattcct	cacagaagtg	5100

gatgggggtgc	ggttgcacag	gtacgctcca	gcgtgcaaac	ccctcctacg	ggaggagggtc	5160
acatttcctgg	tcgggctcaa	tcaatacctg	gttgggtcac	agctcccacg	cgagcccgaa	5220
ccggacgtag	cagtgtctac	ttccatgctc	accgacccct	cccacattac	ggcggagacg	5280
gctaagcgta	ggctggccag	gggatctccc	ccctccttgg	ccagctcatc	agctatccag	5340
ctgtctgcgc	cttccttgaa	ggcaacatgc	actaccgctc	atgactcccc	ggagcgtgac	5400
ctcatcgagg	ccaacctoct	gtggcggcag	gagatgggcg	ggaacatcac	ccgcgtggag	5460
tcagaaaata	aggtagtaat	tttggagtct	ttcgagccgc	tccaagcggg	ggaggatgag	5520
agggaagtat	ccgttcgggc	ggagatcctg	cggaggtcca	ggaaattccc	tcgagcgatg	5580
cccatatggg	cacgcccggg	ttacaaccct	ccactgttag	agtcctggag	ggacccggac	5640
tacgtccctc	cagtgggtaca	cgggtgtcca	ttgccgcctg	ccaaggcccc	tccggtacca	5700
cctccacgga	ggaagaggac	ggttgtcctg	ccagaatcta	ccgtgtcttc	cgccttggcg	5760
gagctcgcca	caaagacctt	cggcagctcc	gaatcgctcg	ccgtcgacag	cggcacggca	5820
acggcctctc	ctgactagcc	ctccaacgac	ggcgacgcgg	gatccgacgt	tgagtcgtac	5880
tcccccatgc	cccccttga	gggggagccg	ggggatcccc	attccagcga	cgggtcttgg	5940
tctaccgtaa	gcgagggggg	tagtgaggac	gtcgtctgct	gctcgatgtc	ctacacatgg	6000
acaggcgccc	tgatcacgcc	atgcgctgcg	gaggaaacca	agctgcccac	caatgcactg	6060
agcaactctt	tgtctcgtca	ccacaacttg	gtctatgcta	caacatctcg	cagcgcaagc	6120
ctgcccgcga	agaagggtcac	ctttgacaga	ctgcaggctc	tggacgacca	ctaccggtgac	6180
gtgctcaagg	agatgaaggc	gaaggcgtcc	acagttaagg	ctaaacttct	atccgtggag	6240
gaagcctgta	agctgacgcc	cccacattcg	gccagatcta	aattttggcta	tggggcaaaag	6300
gacgtccgga	acctatccag	caaggccggt	aaccacatcc	gctccgtgtg	gaaggacttg	6360
ctggaagaca	ctgagacacc	aattgacacc	accatcatgg	caaaaaatga	ggtttttctgc	6420
gtccaaccag	agaagggggg	cgcgaagcca	gctcgcccta	tcgtattccc	agattttgggg	6480
gttcgtgtgt	gcgagaaaaa	ggccctttac	gatgtggtct	ccaccctccc	tcaggccgtg	6540
atgggctctt	catacggatt	ccaatactct	cctggacagc	gggtcgagtt	cctggtgaat	6600
gcctggaaaag	cgaagaaatg	ccctatgggc	ttcgcatatg	acaccgctg	ttttgactca	6660
acgggtcactg	agaatgacat	ccgtgttagg	gagtcaatct	accaatgttg	tgacttggcc	6720
cccgaagcca	gacaggccat	aaggtcgctc	acagagcgcc	tttacatcgg	gggccccctg	6780
actaattcta	aagggcagaa	ctgcggctat	cgccggtgcc	gcgcgagcgg	tgtactgacg	6840
accagctgcg	gtaataccct	cacatgttac	ttgaaggccg	ctgcggcctg	tcgagctgcg	6900
aagctccagg	actgcacgat	gctcgtatgc	ggagacgacc	ttgtcgttat	ctgtgaaagc	6960
gcggggaccc	aagaggacga	ggcgagccta	cgggccttca	cggaggctat	gactagatac	7020
tctgcccccc	ctggggaccc	gccccaaacca	gaatacgact	tggagttgat	aacatcatgc	7080
tcttccaatg	tgtcagtcgc	gcacgatgca	ttgggcaaaa	gggtgtacta	tctcaccctg	7140
gacccaccca	gcccccttgc	gcgggctgcg	tgggagacag	ctagacacac	tccagtcact	7200
tcttggttag	gcaacatcat	catgtatgcg	cccaccttgt	gggcaaggat	gatcctgatg	7260
actcatttct	tctccatcct	tctagctcag	gaacaacttg	aaaaagccct	agattgtcag	7320
atctacgggg	cctgttactc	cattgagcca	cttgacctac	ctcagatcat	tcaacgactc	7380
catggcctta	gcgcattttc	actccatagt	tactctccag	gtgagatcaa	taggggtggct	7440
tcatttctac	ggaaacttgg	ggtaccgccc	ttgcgagctg	ggagacatcg	ggccagaagt	7500
gtccgcgcta	gtccactgtc	ccaggggggg	agggtgccca	cttgtggcaa	gtacctcttc	7560
aactgggcag	taaggaccaa	gctcaaactc	actccaatcc	cggctgcgtc	ccagttggat	7620
ttatccagct	ggttcgttgc	tggttacagc	gggggagaca	tatatcacag	cctgtctcgt	7680
gcccgacccc	gctgggtcat	gtgggtgccta	ctcctacttt	ctgtaggggt	aggcatctat	7740
ctactcccca	accgatgaac	ggggacctaa	acactccagg	ccaataggcc	atcctgtttt	7800
tttccctttt	ttttttcttt	tttttttttt	tttttttttt	tttttttttt	ttctcctttt	7860
tttttctctt	ttttttcctt	ttctttcctt	tgggtggtcc	atcttagccc	tagtcacggc	7920
tagctgtgaa	aggctcgtga	gccgcttgac	tgcagagagt	gctgatactg	gcctctctgc	7980
agatcaagta	ctcctgcagg	cgcgccacta	gtgggaatac	gcgggggtatg	ccgcgtttta	8040
gcatattgac	gaoccaaattc	tcatgtttga	cagcttatca	tcgataagct	ttaatgcggt	8100
agtttatcac	agttaaattg	ctaacgcagt	caggcacctg	gtatgaaatc	taacaatgcg	8160
ctcatcgtca	tccctggcac	cgtcacccctg	gatgctgtag	gcataggcct	ggttatgccc	8220
gtactgccgg	gcctcttgcg	ggatatcgctc	cattccgaca	gcacgcgccg	tcactatggc	8280
gtgctgctag	cgtatatatg	gttgatgcaa	tttctatgcg	caccgcgtct	cggagcactg	8340
tccgaccgct	ttggccgccc	cccagtcctg	ctcgccttcg	tacttggagc	cactatcgac	8400
tacgcgatca	tggcgaccac	acccgtcctg	tggatcctct	acgcgggacg	catcgtggcc	8460
ggcatcacgg	gcgcacacag	tgcggttgct	ggcgcctata	tcgcgcacat	caccgatggg	8520
gaagatcggg	ctcgccactt	cgggctcatg	agcgtttgtt	tcggcggtggg	tatgggtggca	8580
ggccccgtgg	ccgggggact	gttggggcgc	atctccttgc	atgcaccatt	ccttgcggcg	8640
gcggtgctca	acggcctcaa	cctactactg	ggctgcttcc	taatgcagga	gtcgcataag	8700
ggagagcgtc	gaccgatgcc	cttgagagcc	ttcaaccacg	tcagctcctt	ccggtggggc	8760
cggggcatga	ctatcgtcgc	cgcacttatg	actgtcttct	ttatcatgca	actcgttaga	8820
caggtgcctg	cagcgcctctg	ggtcattttc	ggcgaggacc	gctttcgtcg	gagcgcgacg	8880
atgatcgccc	tgtcgcttgc	ggtattcgga	atcttgcacg	ccctcgctca	agccttctgc	8940
actgggtccc	ccaccaaacg	tttcggcgag	aagcaggcca	ttatcgccgg	catggcggcc	9000
gacgcgctgg	gctacgtctt	gctggcgctc	gcgacgcgag	gctggatggc	cttccccatt	9060

atgattcttc	tcgcttccgg	cgccatccgg	atgcccgct	tgcaggccat	gctgtccagg	9120
caggtagatg	acgaccatca	gggacagctt	caaggatcgc	tcgcggtctt	taccagccta	9180
acttcgatca	ctggaccgct	gatcgctcag	gcgatttatg	ccgcctcggc	gagcacatgg	9240
aacgggttgg	catggattgt	aggcgccggc	ctataccttg	tctgcctccc	cgcgttgcgt	9300
cgcggtgcat	ggagccgggc	cacctcgacc	tgaatggaag	ccggcgggag	ctcgctaaag	9360
gattcaccac	tccaagaatt	ggagccaatc	aattcttgcg	gagaactgtg	aatgcgcaaa	9420
ccaacccttg	gcagaacata	tccatcgctg	ccgccatctc	cagcagccgc	acgcggcgca	9480
tctcgggcag	cggttgggtcc	tggccacggg	tgcgcatgat	cgtgctcctg	tcgttgagga	9540
cccggctagg	ctggcggggt	tgccttactg	gttagcagaa	tgaatcaccg	atacgcgagc	9600
gaacgtgaag	cgactgctgc	tgcaaaacgt	ctgcgacctg	agcaacaaca	tgaatgggtct	9660
tcgggtttccg	tgtttcgtaa	agtctggaaa	cgcggaagtc	agcgccctgc	accattatgt	9720
tccggatctg	catcgcagga	tgctgctggc	taccctgttg	aacacctaca	tctgtattaa	9780
cgaagcgctg	gcattgaccc	tgagtgtatt	ttctctgggtc	ccgccgcctc	cataccgcca	9840
gttggtttacc	ctcacaacgt	tccagtaacc	gggcatgttc	atcatcagta	acccgtatcg	9900
tgagcatcct	ctctcgtttc	atcggtatca	ttaccccat	gaacagaaat	tcccccttac	9960
acggaggcat	caagtgaaca	aacaggaaaa	aaccgcccctt	aacatggccc	gcttttatcag	10020
aagccagaca	ttaacgcttc	tggagaaaat	caacgagctg	gacgcggatg	aacaggcaga	10080
catctgtgaa	tccgcttcacg	accacgctga	tgagctttac	cgcagctgcc	tcgcgcgttt	10140
cggtgatgac	ggtgaaaacc	tctgacacat	gcagctcccg	gagacgggtca	cagcttgtct	10200
gtaagcggat	gccgggagca	gacaagcccg	tcaggcgcg	tcagcgggtg	ttggcggggtg	10260
tcggggcgca	gccatgaccc	agtcacgtag	cgatagcggg	gtgtatactg	gcttaactat	10320
gcggcatcag	agcagattgt	actgagagtg	caccatatgc	ggtgtgaaat	accgcacaga	10380
tgcgtaagga	gaaaataccg	catcaggcgc	tcttccgctt	cctcgctcac	tgactcgctg	10440
cgctcggtcg	ttcggtgctg	gcgagcggtg	tcagctcact	caaaggcggt	aatacggtta	10500
tccacagaat	caggggataa	cgcaggaaag	aacatgtgag	caaaaggcca	gcaaaaggcc	10560
aggaaccgta	aaaaggccgc	gttgctggcg	tttttccata	ggctccgccc	ccctgacgag	10620
catcacaaaa	atcgacgctc	aagtcagagg	tggcgaaacc	cgacaggact	ataaagatac	10680
caggcgtttc	cccctggaag	ctccctcgtg	cgtctcctctg	ttccgaccct	gccgcttacc	10740
ggatacctgt	ccgcctttct	cccttcggga	agcgtggcgc	tttctcatag	ctcacgctgt	10800
aggtatctca	gttcgggtgta	ggtcgttcgc	tccaagctgg	gctgtgtgca	cgaaccccc	10860
gttcagcccg	accgctgcgc	cttatccggt	aactatcgctc	ttgagtccaa	cccggtaaga	10920
cacgacttat	cgccactggc	agcagccact	ggtaacagga	ttagcagagc	gaggatgtga	10980
ggcggtgcta	cagagttcct	gaagtgggtg	cctaactacg	gctacactag	aaggacagta	11040
tttggtatct	gcgctctgct	gaagccagtt	accttcggaa	aaagagttgg	tagctcttga	11100
tccggcaaac	aaaccaccgc	tggtagcggt	ggtttttttg	tttgcaagca	gcagattacg	11160
cgcagaaaaa	aaggatctca	agaagatcct	ttgatctttt	ctacgggggtc	tgacgctcag	11220
tggaaacgaa	actcacgtta	agggattttg	gtcatgagat	tatcaaaaag	gatcttcacc	11280
tagatccttt	tctagataat	acgactcact	ata			11313

<210> 7

<211> 11313

<212> DNA

<213> Artificial Sequence

<220>

<223> Plasmid

<400> 7

gccagccccc	gattgggggg	gacactccac	catagatcac	tcccctgtga	ggaactactg	60
ctttcacgca	gaaagcgtct	agccatggcg	ttagtatgag	tgtcgtgcag	cctccaggac	120
ccccctccc	gggagagcca	tagtggtctg	cggaaccggg	gagtacaccg	gaattgccag	180
gacgaccggg	tcctttcttg	gatcaaccgc	ctcaatgcct	ggagatttgg	gcgtgcccc	240
gcgagactgc	tagccgagta	gtgttgggtc	gcgaaaggcc	ttgtgggtact	gcctgatagg	300
gtgcttgcca	gtgccccggg	aggtctcgta	gaccgtgcac	catgagcacg	aatcctaacc	360
ctcaaagaaa	aaccaaaggg	cgcgccatga	ttgaacaaga	tggattgcac	gcaggttctc	420
cggcgctgtg	ggtggagagg	ctattcggct	atgactgggc	acaacagaca	atcggctgct	480
ctgtgcgcgc	cgtgttcggg	ctgtcagcgc	agggcgccgc	ggttcttttt	gtcaagaccg	540
acctgtccgg	tgcctgaat	gaactgcagg	acgaggcagc	gcggctatcg	tggctggcca	600
cgacggggcg	tccttgcgca	gctgtgctcg	acgttgtcac	tgaagcggga	agggactggc	660
tgctattggg	cgaagtgcgc	gggcaggatc	tcctgtcctc	tcaccttgct	cctgccgaga	720
aagtatccat	catggctgat	gcaatgcggc	ggctgcatac	gcttgatccg	gctacctgcc	780
cattcgacca	ccaagcgaaa	catcgcatcg	acgcgacacg	tactcggtatg	gaagccggtc	840
ttgtcgatca	ggatgatctg	gacgaagagc	atcaggggct	cgcgccagcc	gaactgttcg	900
ccaggctcaa	ggcgcgcatg	cccgcggcgc	aggatctcgt	cgtgaccat	ggcgatgcct	960

gcttgccgaa	tatcatgggtg	gaaaatggcc	gcttttctgg	attcatcgac	tgtggccggc	1020
tgggtgtggc	ggaccgctat	caggacatag	cggttggtac	ccgtgatatt	gctgaagagc	1080
ttggcgccga	atgggctgac	cgcttcctcg	tgctttacgg	tatcgccgct	cccgaattcg	1140
agcgcatcgc	cttctatcgc	cttcttgacg	agttcttctg	agtttaaaca	gaccacaacg	1200
gtttccctct	agcgggatca	attccgcccc	tctccctccc	ccccccctaa	cgtaactggc	1260
cgaagccgct	tggataaagg	ccggtgtgcy	tttgtctata	tgttattttc	caccatattg	1320
ccgtcttttg	gcaatgtgag	ggcccggaaa	cctggccctg	tcttcttgac	gagcattcct	1380
aggggtcttt	ccctctcgc	caaaggaatg	caaggtctgt	tgaatgtcgt	gaaggaagca	1440
gttctctctg	aagcttcttg	aagacaaaaca	acgtctgtag	cgaccctttg	caggcagcgg	1500
aacccccac	ctggcgacag	gtgcctctgc	ggccaaaagc	cacgtgtata	agatacacct	1560
tgcaaggcgg	cacaacccca	gtgccacgtt	gtgagttgga	tagttgtgga	aagagtcaaa	1620
ggctctctct	caagcgatatt	caacaagggg	ctgaaggatg	cccagaagg	acccatttgt	1680
atgggatctg	atctggggcc	tcggtgcaca	tgctttacat	gtgttttagtc	gagggtaaaa	1740
aacgtctagg	ccccccgaac	cacggggacg	tggttttctt	ttgaaaaaca	cgataatacc	1800
atggcgccca	ttacggccca	ctcccaacag	acgcgaggcc	tacttggctg	catcatcact	1860
agcctcacag	gcccgggacag	gaaccaggtc	gagggggagg	tccaagtgg	ctccaccgca	1920
acacaatctt	tcctggcgac	ctgcgtcaat	ggcgtgtgtt	ggactgtcta	tcattgtgac	1980
ggctcaaaga	cccttgccgg	cccaaaggcg	ccaatcaccc	aaatgtacac	caatgtggac	2040
caggacctcg	tcggctggca	agcgcccccc	ggggcgcgct	ccttgacacc	atgcacctgc	2100
ggcagcgccg	acctttactt	ggtcacgagg	catgccgatg	tcattccggt	gcgcccggcg	2160
ggcgacagca	ggggggagcct	actctcccc	aggcccgttt	cctacttgaa	gggctcttcg	2220
ggcgggtccac	tgctctgccc	ctcggggcac	gctgtggggc	tctttcgggc	tgccgtgtgc	2280
acccgaaggg	ttgcgaaggg	ggtggacttt	gtaccgcgcg	agtctatggg	aaccactatg	2340
cggctcccg	tcttcacgga	caactcgtcc	cctccggccg	taccgcagac	attccagggtg	2400
gcccattctac	acgcccctac	tggtagcggc	aagagcacta	aggtgccggc	tgcgtagtca	2460
gcccgaaggg	ataaggtgct	tgtcctgaac	ccgtccgctg	ccgccaccct	aggtttcggg	2520
gcgtatatgt	ctaaggcaca	tggtatcgac	cctaaccatca	gaaccgggg	aaggaccatc	2580
accacgggtg	cccccatcac	gtactccacc	tatggcaagt	ttcttgccga	cggtggttgc	2640
tctggggggc	cttatgacat	cataatatgt	ctgagtgcc	actcaactga	ctcgaccact	2700
atcctgggca	tcggcacagt	cctggaccaa	gcggagacgg	ctggagcgcg	actcgtcgtg	2760
ctcgccaccg	ctacgcctcc	gggatcggtc	accgtgccac	atccaaacat	cgaggagggtg	2820
gctctgtcca	gcactggaga	aatccccctt	tatggcaaag	ccatccccat	cgagaccatc	2880
aaggggggga	ggcacctcat	tttctgccat	tccaagaaga	aatgtgatga	gctcgccgcg	2940
aagctgtccg	gctcgggact	caatgctgta	gcataattacc	ggggccttga	tgtatccgtc	3000
ataccaacta	gcggagacgt	cattgtcgta	gcaacggacg	ctctaattgac	gggctttacc	3060
ggcgatttctg	actcagtgat	cgactgcaat	acatgtgtca	cccagacagt	cgacttcagc	3120
ctggaccgca	ccttcaccat	tgagacgacg	accgtgccac	aagacgcgg	gtcacgctcg	3180
cagcgccgag	gcaggactgg	taggggcagg	atgggcattt	acaggtttgt	gactccagga	3240
gaacggccct	cgggcatggt	cgattcctcg	gttctgtgcy	agtgttatga	cgcgggctgt	3300
gcttggtagc	agctcacgcc	cgccgagacc	tcagttaggt	tgcgggctta	cctaaacaca	3360
ccagggttgc	ccgtctgcca	ggaccatctg	gagttctggg	agagcgtctt	tacaggcctc	3420
accacatag	acgcccattt	cttgtcccag	actaagcagg	caggagacaa	cttcccctac	3480
ctggtagcat	accaggctac	ggtgtgcgcc	agggctcagg	ctccacctcc	atcgtgggac	3540
caaattgtgga	agtgtctcat	acggctaaag	cctacgctgc	acggggccaa	gcccctgctg	3600
tataggctgg	gagccgttca	aaacgaggtt	actaccacac	accccataac	caaatacatc	3660
atggcatgca	tgtcagctga	cctggaggtc	gtcacgagca	cctgggtgct	ggtaggcgga	3720
gtccctagcag	ctctggccgc	gtattgcctg	acaacaggca	gcgtggctcat	tgtgggcagg	3780
atcatcttgt	ccggaaagcc	ggccatcatt	cccgacagg	aagtctttta	ccgggagttc	3840
gatgagatgg	aagagtgcgc	ctcacacctc	ccttacatcg	aacggggaat	gcagctcgcc	3900
gaacatttca	aacagaaggc	aatcgggttg	ctgcaaacag	ccaccaagca	agcggaggct	3960
gctgctcccg	cgggtggaatc	caagtggcgg	accctcgaag	ccttctgggc	gaagcatatg	4020
tggaaatttca	tcagcgggat	acaatattta	gcaggcttgt	ccactctgcc	tggcaacccc	4080
gcgatagcat	cactgatggc	attcacagcc	tctatcacca	gcccgcctac	cacccaacat	4140
accctcctgt	ttaacatcct	ggggggatgg	gtggccgccc	aacttgctcc	tcccagcgct	4200
gcttctgctt	tcgtaggcgc	cggcatcgct	ggagcggctg	ttggcagcat	aggccttggg	4260
aaggtgcttg	tggatatttt	ggcaggttat	ggagcagggg	tggcaggcgc	gctcgtggcc	4320
tttaaggtca	tgagcggcga	gatgccctcc	accgaggacc	tggttaacct	actccctgct	4380
atcctctccc	ctggcgccct	agtctgcgg	gtcgtgtgcy	cagcgatact	gcgtcggcac	4440
gtgggcccag	gggagggggc	tgtgcagtgg	atgaaccggc	tgatagcgtt	cgcttcgagg	4500
ggtaaccacg	tctcccccc	gcactatgtg	cctgagagcg	acgtctcagc	acgtgtcact	4560
cagatcctct	ctagtcttac	catcactcag	ctgctgaaga	ggcttcacca	gtggatcaac	4620
gaggactgct	ccacgccatg	ctccggctcg	tggctaagag	atgtttggga	ttggatatgc	4680
acgggtgtga	ctgatttcaa	gacctggctc	cagtcacatc	tcctgcccgc	attgcccggga	4740
gtccccctct	tctcatgtca	acgtgggtac	aagggaagtc	ggcggggcga	cggcatcatg	4800
caaaccacct	gcccattgtg	agcacagatc	accggacatg	tgaaaaacgg	ttccatgagg	4860
atcgtggggc	ctaggacctg	tagtaacacg	tggcatggaa	cattccccat	taacgcgtac	4920

accacggggcc	cctgcacgcc	ctccccggcg	ccaaattatt	ctagggcgct	gtggcggtg	4980
gctgctgagg	agtacgtgga	ggttacgcgg	gtgggggatt	tccactacgt	gacgggcatg	5040
accactgaca	acgtaaagtg	cccggtgcag	gttccggccc	ccgaattctt	cacagaagtg	5100
gatgggggtgc	ggttgcacag	gtacgctcca	gcgtgcaaac	ccctcctacg	ggaggagggtc	5160
acattcctgg	tgggggtcaa	tcaatacctg	gttgggtcac	agctcccatg	cgagcccgaa	5220
ccggacgtag	cagtgtccac	ttccatgctc	accgacccct	cccacattac	ggcggagacg	5280
gctaagcgta	ggctggccag	gggatctccc	ccctccttgg	ccagctcatc	agctagccag	5340
ctgtctgcgc	cttcccttgaa	ggcaacatgc	actaccgcgc	atgactcccc	ggacgctgac	5400
ctcatcgagg	ccaacctcct	gtggcggcag	gagatgggcg	ggaacatcac	ccgcgtggag	5460
tcagaaaata	aggtagtaat	tttggactct	ttcgagccgc	tccaagcgga	ggaggatgag	5520
agggaaagtat	ccgttccggc	ggagatcctg	cggaggtcca	ggaaattccc	tcgagcgatg	5580
cccatatggg	cacgcgccga	ttacaaccct	ccactgttag	agtcctggag	ggaccgcgac	5640
tacgtccctc	cagtgggtaca	cgggtgtcca	ttgccgcctg	ccaaggcccc	tcgggtacca	5700
cctccacgga	ggaagaggac	ggttgtcctg	ccagaatcta	ccgtgtcttc	cgccctggcg	5760
gagctcgcca	caaagacctt	cggcagctcc	gaatcgctcg	ccgtcgacag	cggcacggca	5820
acggcctctc	ctgactagcc	ctccaacgac	ggcgacgcgg	gatccgacgt	tgagtgcgtac	5880
tcccccttaa	cccccttga	gggggagccg	ggggatcccc	attccagcga	cgggtccttgg	5940
tctaccgtaa	tagtgagggt	tagtgagggt	gtcgtctgct	gctcgatgtc	ctacacatgg	6000
acaggcgccc	tgatcacgcc	atgcgctgcg	gaggaaacca	agctgcccat	caatgcactg	6060
agcaactctt	tgctccgtca	ccacaacttg	gtctatgcta	caacatctcg	cagcgcaagc	6120
ctgcggcaga	agaaggtcac	ctttgacaga	ctgcaggtcc	tggaacacca	ctaccgggac	6180
gtgctcaagg	agatgaaggc	gaaggcgctc	acagttaagg	ctaaacttct	atccgtggag	6240
gaagcctgta	agctgacgcc	cccacattcg	gccagatcta	aatttggcta	tggggcaaaag	6300
cagctccgga	acctatccag	caaggccgtg	aacacatccc	gctccgtgtg	gaaggacttg	6360
ctggaagaca	ctgagacacc	aattgacacc	accatcatgg	caaaaaatga	ggttttctgc	6420
gtccaaccag	agaagggggg	ccgcaagcca	gctcgcctta	tcgtattccc	agatttgggg	6480
gttcgtgtgt	gcgagaaaat	ggccctttac	gatgtggtct	ccaccctccc	tcaggccgtg	6540
atgggctctt	catacggatt	ccaatactct	cctggacagc	gggtcgagtt	cctgggtgaat	6600
gctctggaag	cgaagaaatg	ccctatgggc	ttcgcatacg	acaccgcgtg	ttttgactca	6660
acggtcactg	agaatgacat	ccgtgttgag	cagtcfaatct	accaatgttg	tgacttggcc	6720
cccgaagcca	gacaggccat	aaggctcgctc	acagagcggc	tttacatcgg	gggccccctg	6780
actaattcta	aagggcagaa	ctgcggctat	cgccggtgcc	gcgcgagcgg	tgtactgacg	6840
accagctgcg	gtaataccct	cacatgttac	ttgaaggccg	ctgcggcctg	tcgagctgcg	6900
aagctccagg	actgcacgat	gctcgtatgc	ggagacgacc	ttgtcgttat	ctgtgaaagc	6960
gcggggaccc	aagaggacga	ggcgagccta	cgggccttca	cggaggctat	gactagatac	7020
tctgcccccc	ctgggggacc	gcccacacca	gaatacgact	tggaagtgat	aacatcatgc	7080
tcctccaatg	tgctagtcgc	gcacgatgca	tctggcaaaa	gggtgtacta	tctcaccctg	7140
gacccaccca	cccccttgc	gcgggctgcg	tggaagacag	ctagacacac	tccagtcaat	7200
tcctggctag	gcaacatcat	catgtatgcg	cccaccttgt	gggcaaggat	gatcctgatg	7260
actcatttct	tctccatcct	tctagctcag	gaacaacttg	aaaaagccct	agattgtcag	7320
atctacgggg	cctgttactc	cattgagcca	cttgacctac	ctcagatcat	tcaacgactc	7380
catggcctta	gcgcattttc	actccatagt	tactctccag	gtgagatcaa	taggggtggct	7440
tcatgcctca	ggaaacttgg	ggtaccgccc	ttgcgagtct	ggagacatcg	ggccagaagt	7500
gtccgcgcta	ggctactgtc	ccaggggggg	agggctgcca	cttgtggcaa	gtacctcttc	7560
aactgggcag	taaggaccaa	gctcaaactc	actccaatcc	cggctgcgtc	ccagttggat	7620
ttatccagct	ggttcgttgc	tggttacagc	gggggagaca	tatatcacag	ctgtctcgt	7680
gccccacccc	gtgggttcat	ctcctacttt	ctcctacttt	ctgtaggggt	aggcatctat	7740
ctactcccca	accgatgaac	ggggaccta	acactccagg	ccaataggcc	atcctgtttt	7800
tttccctttt	tttttttctt	tttttttttt	tttttttttt	tttttttttt	ttctcctttt	7860
tttttccctt	ttttttcctt	ttctttcctt	tggtggctcc	atcttagccc	tagtcacggc	7920
tagctgtgaa	aggtccgtga	gccgcttgac	tgcagagagt	gctgatactg	gcctctctgc	7980
agatcaagta	ctcctgcagg	cgcgccacta	gtgggaatac	gcggggtatg	ccgcgtttta	8040
gcatattgac	gacccaattc	tcatgtttga	cagcttatca	tcgataagct	ttaatgcgggt	8100
agtttatcac	agttaaattg	ctaacgcagt	caggcacctg	gtatgaaatc	taacaatgcg	8160
ctcatcgtea	tcctcggcac	cgtcaccctg	gatgctgtag	gcataggctt	ggttatgccg	8220
gtactgcccg	gcctcttgcg	ggatatcgctc	cattccgaca	gcatcgccag	tcactatggc	8280
gtgctgtcat	cgtatatatg	gttgatgcaa	tttctatgcg	caccggttct	cggagcactg	8340
tcgcaccgct	ttggcccgcg	ccagtcctcg	ctcgtcttcg	tacttggagc	cactatcgac	8400
tacgcgatca	tggcgaccac	accgctcctg	tggatcctct	acgcgggacg	catcgtggcc	8460
ggcatcaccc	gcgccacagg	tgcggttgc	ggcgccata	tcgccgacat	caccgatggg	8520
gaagatccgg	ctcgccactt	cgggctcatg	agcgcttggt	tcggcggtgg	tatgggtggca	8580
ggccccgctg	ccgggggact	gttgggcgcc	atctccttgc	atgcaccatt	ccttgcggcg	8640
gcgggtgctca	acgggcctcaa	cctactactg	ggctgcttcc	taatgcagga	gtcgcataag	8700
ggagagcgctc	gcagcatgcc	cttgagagcc	ttcaaccacg	tcagctcctt	ccgggtggcg	8760
cggggcatga	ctatcgctcg	cgcacttatg	actgtcttct	ttatcatgca	actcgtagga	8820
caggtgccgg	cagcgctctg	ggtcattttc	ggcgaggacc	gctttcgtcg	gagcgcgacg	8880

atgateggcc	tgtegettgc	ggatttcgga	atcttgacg	ccctcgetca	agccttcgtc	8940
actgggtccc	ccaccaaacg	tttcggcgag	aagcaggcca	ttatcgccgg	catggcgggc	9000
gacgcgctgg	gctacgtctt	gctggcggtc	gcgacgcgag	gctggatggc	cttccccatt	9060
atgattcttc	tcgcttcggg	cggcacgcgg	atgcccgcgt	tgcaggccat	gctgtccagg	9120
caggtagatg	acgaccatca	gggacagctt	caaggatcgc	tgcgggctct	taccagccta	9180
acttcgatca	ctggaccgct	gatcgtcacg	gcgatttatg	ccgcctcggc	gagcacatgg	9240
aacgggttgg	catggattgt	aggcgccggc	ctataccttg	tctgcctccc	cgcggtgcgt	9300
cgcggtgcat	ggagccgggc	cacctcgacc	tgaatggaag	ccggcgggcac	ctcgctaacg	9360
gattcaccac	tccaagaatt	ggagccaatc	aattcttgcg	gagaactgtg	aatgcgcaaa	9420
ccaacccttg	gcagaacata	tccatcgcg	ccgccatctc	cagcagccgc	acgcggcgca	9480
tctcgggcag	cgttgggtcc	tggccacggg	tgcgcatgat	cgtgctcctg	togttgagga	9540
cccggctagg	ctggcggggt	tgcccttactg	gttagcagaa	tgaatcaccc	atacgcgagc	9600
gaacgtgaag	cgactgctgc	tgcaaaacgt	ctgcgacctg	agcaacaaca	tgaatgggtct	9660
tcggtttccg	tgtttctgtaa	agtctggaaa	cgcggaagtc	agcgccctgc	accattatgt	9720
tccggatctg	catcgagga	tgctgctggc	taccctgtgg	aacacctaca	tctgtattaa	9780
cgaagcgctg	gcattgaccc	tgagtgattt	ttctctggtc	ccgcgcgcatc	cataccgcca	9840
gttggtttacc	ctcacaacgt	tccagtaacc	gggcatgttc	atcatcagta	accogtatcg	9900
tgagcatcct	ctctcgtttc	atcggtatca	ttacccccat	gaacagaaat	tcccccttac	9960
acggaggcat	caagtgaacca	aacaggaaaa	aaccgccctt	aacatggccc	gcttttatcag	10020
aagccagaca	ttaacgcttc	tggagaaact	caacgagctg	gacgcggatg	aacaggcaga	10080
catctgtgaa	tcgcttcacg	accacgctga	tgagctttac	cgcagctgcc	tcgcgcggtt	10140
cggtgatgac	ggtgaaaacc	tctgacacat	gcagctcccc	gagacgggtca	cagcttgctct	10200
gtaagcggat	gccgggagca	gacaagcccg	tcagggcgcg	tcagcgggtg	ttggcggggtg	10260
tcggggcgca	gccatgaccc	agtcacgtag	cgatagcgga	gtgtatactg	gcttaactat	10320
gcggcatcag	agcagattgt	actgagagtg	caccatatgc	ggtgtgaaat	accgcacaga	10380
tgcgtaagga	gaaaataccg	catcaggcgc	tcttccgctt	cctcgctcac	tgactcgctg	10440
cgctcggtcg	ttcggtcgcg	gcgagcggtg	tcagctcact	caaaggcggt	aatacgggtta	10500
tccacagaat	caggggataa	cgcaggaaag	aacatgtgag	caaaaggcca	gcaaaaggcc	10560
aggaaccgta	aaaaggccgc	gttgctggcg	tttttccata	ggctccgccc	ccctgacgag	10620
catcacaaaa	atcgacgctc	aagtcagagg	tggcgaaacc	cgacaggact	ataaagatac	10680
caggcgtttc	cccttggaag	ctccctcgctg	cgctctcctg	ttccgaccct	gccgcttacc	10740
ggatacctgt	ccgcctttct	cccttcggga	agcgtggcgc	tttctcatag	ctcacgctgt	10800
aggtatctca	gttcgggtgta	ggtcggtcgc	tccaagctgg	gctgtgtgca	cgaaccccc	10860
gttcagcccg	accgctgcgc	cttatccggg	aactatcgct	ttgagtccaa	cccggtaaga	10920
cacgacttat	cgccactggc	agcagccact	ggtaaacgga	ttagcagagc	gagggtgta	10980
ggcggtgcta	cagagttctt	gaagtgggtg	cctaactacg	gctacactag	aaggacagta	11040
tttggtatct	gcgctctgct	gaagccagtt	accttcggaa	aaagagttgg	tagctcttga	11100
tccggcaaac	aaaccaccgc	tggtagcggt	ggtttttttg	tttgcaagca	gcagattacg	11160
cgcagaaaaa	aaggatctca	agaagatcct	ttgatctttt	ctacgggggtc	tgacgctcag	11220
tggaacgaaa	actcacgtta	agggattttg	gtcatgagat	tatcaaaaag	gatcttcacc	11280
tagatccttt	tctagataat	acgactcact	ata			11313

<210> 8

<211> 11313

<212> DNA

<213> Artificial Sequence

<220>

<223> Plasmid

<400> 8

gccagccccc	gattgggggg	gacactccac	catagatcac	tcccctgtga	ggaactactg	60
tcttcacgca	gaaagcgctc	agccatggcg	ttagtatgag	tgctcgtcag	cctccaggac	120
ccccctccc	gggagagcca	tagtggtctg	cggaaaccgg	gagtaacacc	gaattgccag	180
gacgaccggg	tcctttcttg	gatcaaccgc	ctcaatgcct	ggagatttgg	gcgtgcccc	240
gcgagactgc	tagccgagta	gtgttggtgc	gcgaaaggcc	ttgtggtact	gcctgatagg	300
gtgcttgcca	gtgccccggg	aggtctcgta	gaccgtgcac	catgagcaag	aatcctaacc	360
ctcaaagaaa	aaccaaaggg	cgcgccatga	ttgaacaaga	tggattgcac	gcaggttctc	420
cggccgcttg	ggtggagagg	ctattcggtc	atgactgggc	acaacagaca	atcggtgctc	480
ctgatgccgc	cgtgttcggg	ctgtcagcgc	aggggcgcgc	ggttcttttt	gtcaagaccg	540
acctgtccgg	tgccctgaat	gaactgcagg	acgaggcagc	gcggctatcg	tggctggcca	600
cgacgggcgt	tccttgccga	gctgtgctcg	acgttgctac	tgaagcggga	agggactggc	660
tgctattggg	cgaagtgcgc	gggcaggatc	tcctgtcatc	tcaccttgct	cctgccgaga	720
aagtatccat	catggctgat	gcaatgcggc	ggctgcatac	gcttgatccg	gctacctgcc	780

cattcgacca	ccaagcgaaa	catcgcatcg	agcgagcagc	tactcggatg	gaagccggtc	840
ttgtcgatca	ggatgatctg	gacgaagagc	atcaggggct	cgcgccagcc	gaactgttcg	900
ccaggctcaa	ggcgcgcatg	cccgcacggc	aggatctcgt	cgtgacccat	ggcgatgcct	960
gcttgccgaa	tatcatgggtg	gaaaatggcc	gcttttctgg	attcatcgac	tgtggccggc	1020
tgggtgtggc	ggaccgctat	caggacatac	cgttqctac	ccgtgatatt	gctgaagagc	1080
ttggcgcgga	atgggctgac	cgcttccctg	tgctttacgg	tatcgccgct	cccgatccgc	1140
agcgcatcgc	cttctatcgc	cttcttgacg	agttcttctg	agtttaaaca	gaccacaacg	1200
gtttccctct	agcgggatca	attccgcccc	tctccctccc	ccccccctaa	cgttactggc	1260
cgaagccgct	tggataaagg	ccggtgtgcg	tttgtctata	tgttattttc	caccatattg	1320
ccgtcttttg	gcaatgtgag	ggcccggaaa	cctggccctg	tcttcttgac	gagcattcct	1380
aggggtcttt	cccctctcgc	caaaggaatg	caaggtctgt	tgaatgtcgt	gaaggaagca	1440
gttctctctg	aagcttcttg	aagacaaaca	acgtctgtag	cgaccctttg	caggcagcgg	1500
aaccccccac	ctggcgacag	gtgcctctgc	ggccaaaagc	cacgtgtata	agatacacct	1560
gcaaaggcgg	cacaacccca	gtgccacgtt	gtgagttgga	tagttgtgga	aagagtcaaa	1620
tggctctcct	caagcgtatt	caacaagggg	ctgaaggatg	cccagaagg	acccattgtg	1680
atgggatctg	atctggggcc	tccgtgcaca	tgctttacat	gtgtttagtc	gaggttaaaa	1740
aacgtctagg	cccccgaaac	cacgggggag	tggttttcct	ttgaaaaaca	cgataatacc	1800
atggcgctta	ttacggccta	ctcccaacag	acgcgaggcc	tacttggctg	catcatcact	1860
agcctcacag	gcccggacag	gaaccaggtc	gagggggagg	tccaagtgg	ctccaccgca	1920
acacaatctt	tcttggcgac	ctgcgtcaat	ggcgtgtgtt	ggactgtcta	tcatggtgcc	1980
ggctcaaaga	cccttgccgg	cccaaagggc	ccaatcaccc	aaatgtacac	caatgtggac	2040
caggacctcg	tcggctggca	agcgcctccc	ggggcgcggt	ccttgacacc	atgcacctgc	2100
ggcagctcgg	acctttactt	ggtcacagg	catgccgatg	tcattccgg	gcgccggcgg	2160
ggcgacagca	gggggagcct	actctccccc	aggcccgctt	cctacttgaa	gggctcttcg	2220
ggcgggtccac	tgtcttgccc	ctcggggcac	gctgtgggca	tctttcgggc	tgcggtgtgc	2280
acccgagggg	ttgcgaaggc	ggtggacttt	gtaccgcgtc	agtctatggg	aaccactatg	2340
cggctcccgg	tcttcacgga	caactcgtcc	cctccggccg	taccgcagac	attccagggtg	2400
gcccactctac	acgcccctac	tggtagcggc	aagagcacta	aggtgccggc	tgcgtatgca	2460
gccaagggtg	ataagggtgt	tgtcctgaac	cgtccgctcg	ccgccaccct	aggtttcggg	2520
gcgtatatgt	ctaaggcaca	tggtagcgac	cctaaccatca	gaaccgggg	aaggaccatc	2580
accacgggtg	cccccatcac	gtactccacc	tatggcaagt	ttcttgccga	cgggtggttg	2640
tctggggggc	cctatgacat	cataatatgt	gatgagtgcc	actcaactga	ctcgaccact	2700
atcctgggca	tccgcacagt	cctggaccaa	gcggagacgg	ctggagcgcg	actcgtcgtg	2760
ctcgcacccg	ctacgcctcc	gggatcggtc	accgtgccac	atccaaacat	cgaggagggtg	2820
gctctgtcca	gcactggaga	aatccccttt	tatggcaaag	ccatccccat	cgagaccatc	2880
aaggggggga	ggcacctcat	tttctgccat	tccaagaaga	aatgtgatga	gctcgcgcgg	2940
aagctgtccg	gcctcggact	caatgctgta	gcatattacc	ggggccttga	tgtatccgtc	3000
ataccaacta	gcggagacgt	cattgtcgta	gcaacggacg	ctctaattgac	gggctttacc	3060
ggcgatttcg	actcagtgat	cgactgcaat	acatgtgtca	cccagacagt	cgacttcagc	3120
ctggaccgga	ccttcaccat	tgagacgacg	accgtgccac	aagacgcgg	gtcacgctcg	3180
cagcggcgag	gcaggactgg	taggggcagg	atgggcattt	acaggtttgt	gactccagga	3240
gaacggccct	cgggcatggt	cgattcctcg	gttctgtgcg	agtgtctatga	cgcgggctgt	3300
gcttggttac	agctcacgcc	cgccgagacc	tcagttaggt	tgcgggctta	cctaaacaca	3360
ccagggttgc	ccgtctgcca	ggaccatctg	gagttctggg	agagcgtctt	tacaggcctc	3420
acccacatag	acgcccattt	cttgtcccag	actaagcagg	caggagacaa	cttcccctac	3480
ctggtagcat	accaggctac	ggtgtgcgcc	agggtctcag	ctccacctcc	atcgtgggac	3540
caaatgtgga	agtgctcat	acggctaaag	cctacgctgc	acgggccaac	gcccgtgctg	3600
tataggctgg	gagccgttca	aaacgaggtt	actaccacac	accccataac	caaatacatc	3660
atggcatgca	tgtcggctga	cctggaggtc	gtcacgagca	cctgggtgct	ggtaggcgga	3720
gtcctagcag	ctctggccgc	gtattgcctg	acaacaggca	gcgtggctcat	tgtgggcagg	3780
atcatcttgt	ccggaaagcc	ggccatcatt	cccgcacagg	aagtccttta	ccgggagttc	3840
gatgagatgg	aagagtgcgc	ctcacacctc	ccttacatcg	aacagggaat	gcagctcgcc	3900
gaacaattca	aacagaaggc	aatcgggttg	ctgcaaacag	ccaccaagca	agcggaggct	3960
gctgtctccg	tgggtggaatc	caagtggcgg	accctcgaag	ccttctgggc	gaagcatatg	4020
tgggaatttca	tcagcgggat	acaatattta	gcaggcttgt	ccactctgcc	tggcaacccc	4080
gcgatagcat	cactgatggc	attcacagcc	tctatcacca	gcccgtccac	cacccaacat	4140
acctctctgt	ttaacatcct	ggggggatgg	gtggccgccc	aacttgctcc	tcccagcgtc	4200
gcttctgctt	tcgtaggcgc	cggcatcgct	ggagcggctg	ttggcagcat	aggccttggg	4260
aagggtgctt	tggatatattt	ggcagggttat	ggagcagggg	tggcagggcg	gctcgtggcc	4320
tttaagggtca	tgagcggcga	gatgccctcc	accgaggacc	tggttaacct	actccctgct	4380
atcctctccc	ctggcgccct	agtcgtcggg	gtcgtgtgcg	cagcgatact	gcgtcggcac	4440
gtgggccccg	gggggggggc	tgtgcagtgg	atgaaccggc	tgatagcgtt	cgcttcgcgg	4500
ggtaaccacg	tctccccac	gcactatgtg	cttgagagcg	acgtgcagc	acgtgtcact	4560
cagatcctct	ctagtcttac	catcactcag	cgtctgaaga	ggcttcaoca	gtggatcaac	4620
gaggactgct	ccacgccatg	ctccggctcg	tggctaagag	atgtttggga	ttggatatgc	4680
acgggtgttga	ctgatttcaa	gacctggctc	cagtcgaagc	tcttgccgcg	attgccggga	4740

gtcccccttct	tctcatgtca	acgtgggtac	aagggagtcct	ggcggggcgga	cggcatcatg	4800
caaaccacct	gcccattgtg	agcacagatc	accggacatg	tgaaaaacgg	ttccatgagg	4860
atcgtggggc	ctaggacctg	tagtaacacg	tggcatggaa	cattccccat	taacgcgtac	4920
accacggggc	cctgcacgcc	ctccccggcg	ccaaattatt	ctagggcgct	gtggcggggtg	4980
gctgctgagg	agttacgtgga	ggttacgcqg	gtgggggatt	tccactacgt	gacgggcatg	5040
accactgaca	acgtaaagtg	cccggtgcag	gttccggccc	ccgaattctt	cacagaagtg	5100
gatgggggtgc	ggttgcacag	gtacgctcca	gcgtgcaaac	ccctcctacg	ggaggagggtc	5160
acatttcctgg	tggggctcaa	tcaatacctg	gttgggtcac	agctcccatg	cgagcccgaa	5220
cgggacgtag	cagtgtctac	ttccatgtct	accgacccct	cccacattac	ggcggagacg	5280
gctaagcgta	gggtggccag	gggatctccc	ccctccttgg	ccagctcatc	agctagccag	5340
ctgtctgcgc	cttccttgaa	ggcaacatgc	actaccgctc	atgactcccc	ggacgctgac	5400
ctcatcgagg	ccaacctcct	gtggcgggcg	gagatggggc	ggaacatcac	ccgcgtggag	5460
tcagaaaata	aggtagtaat	tttggactct	ttcgagccgc	tccaagcgga	ggaggatgag	5520
aggggaagtat	ccgttccggc	ggagatcctg	cggaggtcca	ggaaattccc	tcgagcgatg	5580
cccatatggg	cacgcccggg	ttacaaccct	ccactgttag	agtcctggaa	ggacccggac	5640
tacgtccctc	cagtgggtaca	cgggtgtcca	ttgcgcctg	ccaaggcccc	tccgatacca	5700
cctccacgga	ggaagaggac	ggttgtcctg	tcagaatcta	ccgtgtcttc	tgccttggcg	5760
gagctcgcca	caaagacctt	cggcagctcc	gaatcgctcg	ccgtcgacag	cggcacggca	5820
acggcctctc	ctgaccagcc	ctccgacgac	ggcgacgcgg	gatccgacgt	tgagtctgtac	5880
tcctccatgc	cccccttga	gggggagccg	ggggatcccc	atctcagcga	cgggtcttgg	5940
tctaccgtaa	gcgaggaggc	tagtgaggac	gtcgtctgct	gctcgatgtc	ctacacatgg	6000
acaggcgccc	tgatcacgcc	atgcgctgcg	gaggaacca	agctgcccc	caatgcactg	6060
agcaactctt	tgctccgtca	ccacaacttg	gtctatgcta	caacatctcg	cagcgcaagc	6120
ctgcggcaga	agaaggtcac	ctttgacaga	ctgcaggtcc	tggacgacca	ctaccgggac	6180
gtgctcaagg	agatgaaggc	gaaggcgtcc	acagttaagg	ctaaacttct	atccgtggag	6240
gaagcctgta	agctgacgcc	cccacattcg	gccagatcta	aatttggcta	tggggcaaaag	6300
gacgtccgga	acctatccag	caaggccgtt	aaccacatcc	gctccgtgtg	gaaggacttg	6360
ctggaagaca	ctgagacacc	aattgacacc	accatcatgg	caaaaaatga	ggttttctgc	6420
gtccaaccga	agaagggggg	ccgcaagcca	gctcgcttta	tcgtattccc	agatttgggg	6480
gttcgtgtgt	gcgagaaaat	ggccctttac	gatgtggtct	ccaccctccc	tcaggccgtg	6540
atgggctctt	catacggtat	ccaatactct	cctggacagc	gggtcgagtt	cctgggtgaat	6600
gcctggaaag	cgaagaaatg	ccctatgggc	ttcgcatatg	acaccgcgtg	ttttgactca	6660
acgggtcactg	agaatgacat	ccgtgttgag	gagtcaatct	accaatgttg	tgacttggcc	6720
cccgaagcca	gacagggcat	aaggctcgct	acagagcggc	tttacatcgg	gggccccctg	6780
actaattcta	aagggcgagaa	ctgcggctat	cgccgggtgc	gcgcgagcgg	tgtactcagc	6840
accagctgcg	gtaataacct	cacatgttac	ttgaaggccg	ctgcggcctg	tcgagctgcg	6900
aagctccagg	actgcacgat	gctcgtatgc	ggagacgacc	ttgtcgttat	ctgtgaaagc	6960
gcggggaccc	aagaggacga	ggcgagccta	cgggccttca	cggaggctat	gactagatac	7020
tctgcccccc	ctggggaccc	gccccaaacca	gaatacgact	tggagttagt	aacatcatat	7080
tcctccaatg	tgctcagcgc	gcacgatgca	tctggcaaaa	gggtgtacta	tctcaccgtg	7140
gaccccacca	cccccttgc	gcgggctgcg	tgggagacag	ctagacacac	tccagtcaat	7200
tcctggctag	gcaacatcat	catgtatgcg	cccaccttgt	gggcaaggat	gatacctgat	7260
actcatttct	tctccatcct	tctagctcag	gaacaacttg	aaaaagccct	agattgtcag	7320
atctacgggg	cctgttactc	cattgagcca	cttgacctac	ctcagatcat	tcaacgactc	7380
catggcctta	gcgcattttc	actccatagt	tactctccag	gtgagatcaa	taggggtggct	7440
tcatgcctca	ggaaacttgg	ggtaccgccc	ttgcgagtcg	ggagacatcg	ggcgagaagt	7500
gtccgcgcta	ggctactgtc	ccaggggggg	agggctgcca	cttgtggcaa	gtacctcttc	7560
aactgggcag	taaggaccaa	gctcaaactc	actccaatcc	cggctgcgtc	ccagttggat	7620
ttatccagct	ggttcggttg	tggttacagc	gggggagaca	tatatcacag	cctgtctcgt	7680
gcccgcaccc	gctggttcat	gtggtgccta	ctcctacttt	ctgtaggggt	aggcatctat	7740
ctactcccca	accgatgaac	ggggacctaa	acactccagg	ccaataggcc	atcctgtttt	7800
tttccctttt	tttttttctt	tttttttttt	tttttttttt	tttttttttt	ttctcctttt	7860
tttttctctt	ttttttcctt	ttctttcctt	tgggtggctcc	atcttagccc	tagtcacggc	7920
tagctgtgaa	aggtccgtga	gccgcttgac	tgcagagagt	gctgatactg	gcctctctgc	7980
agatcaagta	ctcctgcagg	cgcgccacta	gtgggaatac	gcgggggtatg	ccgcgtttta	8040
gcataattgac	gacccaattc	tcatgtttga	cagcttatca	tcgataagct	ttaatgcggt	8100
agtttatcac	agttaaattg	ctaacgcagt	caggcacctg	gtatgaaatc	taacaatgcg	8160
ctcatcgtea	tcctcggcac	cgtcacccctg	gatgctgtag	gcataaggctt	ggttatgccg	8220
gtactgccgg	gcctcttgcg	ggatatcgte	cattccgaca	gcategccag	tcactatggc	8280
gtgctgctag	cgctatatgc	gttgatgcaa	tttctatgcg	caccgcgttct	cggagcactg	8340
tccgaccgct	ttggccgccc	cccagtcctg	ctcgcttcgc	tacttggagc	cactatcgac	8400
tacgcgatca	tggcgaccac	acccgtcctg	tggatcctct	acgccggacg	catcgtggcc	8460
ggcatcaccc	tgccccacag	tgccgttgct	ggcgccctata	tcgccgacat	caccgatggg	8520
gaagatcggg	ctcgccactt	cgggctcatg	agcgcttggt	tcggcggtggg	tatgggtggca	8580
ggccccgtgg	ccgggggact	gttggggcgc	atctccttgc	atgcaccatt	ccttgcggcg	8640
gcgggtgctca	acggccctcaa	cctactactg	ggctgcttcc	taatgcagga	gtcgcataag	8700

ggagagcgtc	gaccgatgc	cttgagagcc	ttcaaccag	tcagctcctt	ccggtggg	8760
cggggcatga	ctatcgctgc	cgcacttatg	actgtcttct	ttatcatgca	actcgtagga	8820
caggtgccgg	cagcgctctg	ggtcattttc	ggcgaggacc	gctttcgctg	gagcgcgacg	8880
atgatcgccc	tgctcgcttg	ggtattcgga	atcttgacag	ccctcgctca	agccttcgctc	8940
actggtcccc	ccaccaaacg	tttcggcgag	aagcaggcca	ttatcgccgg	catggcgggc	9000
gacgcgctgg	gctacgtctt	gctggcgctc	gcgacgcgag	gctggatggc	cttccccatt	9060
atgattcttc	tcgcttccgg	cggcatcggg	atgcccgcgt	tgaggccat	gctgtccagg	9120
caggtagatg	acgaccatca	gggacagctt	caaggatcgc	tcgcggtctt	taccagccta	9180
acttcgatca	ctggaccgct	gatcgtcacg	gcgatttatg	ccgcctcggc	gagcacatgg	9240
aacgggttgg	catggattgt	aggcgccgcc	ctataccttg	tctgctctcc	cgcgttgctg	9300
cgcggtgcat	ggagccgggc	cacctcgacc	tgaatggaag	ccggcgccac	ctcgctaacc	9360
gattcaccac	tccaagaatt	ggagccaatc	aattcttgcg	gagaactgtg	aatgcgcaaa	9420
ccaacccttg	gcagaacata	tccatcgctg	ccgccatctc	cagcagccgc	acgcggcgca	9480
tctcgggcag	cggtgggtcc	tggccacggg	tgccgatgat	cgtgctcctg	tcggtgagga	9540
cccggctagg	ctggcggggt	tgcttactg	gtagcagaa	tgaatcaccg	atacgcgagc	9600
gaacgtgaag	cgactgctgc	tgcaaaacgt	ctgcgacctg	agcaacaaca	tgaatggtct	9660
tcggtttccg	tggttcgtaa	agtctggaaa	cgcggaagtc	agcgccctgc	accattatgt	9720
tccggatctg	ctacgcagga	tgctgctggc	tacctgtggg	aacacctaca	tctgtattaa	9780
cgaagcgctg	gcattgaccc	tgagtgatct	ttctctggtc	ccgcgcgcatc	cataccgcca	9840
gttggtttacc	ctcacaacgt	tccagtaacc	gggcatgttc	atcatcagta	acccgtatcg	9900
tgagcatcct	ctctcggttt	atcggtatca	ttacccccat	gaacagaaat	tcccccttac	9960
acggaggcat	caagtgaacca	aacaggaaaa	aaccgcccct	aacatggccc	gcttttatcag	10020
aagccagaca	taaagccttc	tggagaaaat	caacgagctg	gacgcggatg	aacaggcaga	10080
catctgtgaa	tcgcttcaag	accacgctga	tgagctttac	cgcagctgcc	tcgcgcgttt	10140
cgggtgatgac	gggtgaaaacc	tctgacacat	gcagctcccg	gagacgggtc	cagcttgtct	10200
gtaagcggat	gccggggagca	gacaagcccg	tcagggcgcg	tcagcgggtg	ttggcggggtg	10260
tcggggcgca	gccatgaccc	agtcacgtag	cgatagcgga	gtgtatactg	gcttaactat	10320
gcggcatcag	agcagattgt	actgagagtg	caccatatgc	ggtgtgaaat	accgcacaga	10380
tgcgtaagga	gaaaataaccg	catcaggcgc	tcttcgctt	cctcgctcac	tgactcgctg	10440
cgctcggtcg	ttcggtctgcg	gcgagcggtg	tcagctcact	caaaggcggt	aatacgggtta	10500
tccacagaat	caggggataa	cgcaggaaag	aacatgtgag	caaaaggcca	gcaaaaggcc	10560
aggaaccgta	aaaaggccgc	gttgctggcg	ttttccata	ggctccgccc	ccctgacgag	10620
catcacaaaa	atcgacgctc	aagtacagag	tggcgaaacc	cgacaggact	ataaagatac	10680
caggcggttc	ccccctggaag	ctccctcgctg	cgctctcctg	ttccgacctt	gccgcttacc	10740
ggatacctgt	ccgcctttct	cccttcggga	agcgtggcgc	tttctcatag	ctcacgctgt	10800
aggtatctca	gttcgggtgta	ggtcggttcgc	tccaagctgg	gctgtgtgca	cgaaccccc	10860
gttcagcccg	accgctgcgc	cttatccggt	aactatcgct	ttgagtccaa	cccggtaaga	10920
cacgacttat	cgccactggc	agcagccact	ggtaacagga	ttagcagagc	gaggatgtga	10980
ggcggtgcta	cagagttctt	gaagtgggtg	cctaactacg	gctacactag	aaggacagta	11040
tttggtatct	gcgctctgct	gaagccagtt	accttcggaa	aaagagttgg	tagctcttga	11100
tccggcaaac	aaaccaccgc	tggtagcggg	ggtttttttg	tttgcaagca	gcagattacg	11160
cgcagaaaaa	aaggatctca	agaagatcct	ttgatctttt	ctacgggggtc	tgacgctcag	11220
tggaacgaaa	actcacgtta	agggattttg	gtcatgagat	tatcaaaaag	gatcttcacc	11280
tagatccttt	tctagataat	acgactcact	ata			11313

<210> 9

<211> 11313

<212> DNA

<213> Artificial Sequence

<220>

<223> Plasmid

<400> 9

gccagccccc	gattgggggc	gacactccac	catagatcac	tccctgtga	ggaactactg	60
tcttcacgca	gaaagcgctc	agccatggcg	ttagtatgag	tgctgtgcag	cctccaggac	120
ccccctccc	gggagagcca	tagtgggtctg	cggaaacggg	gagtaacacc	gaattgccag	180
gacgaccggg	tcctttcttg	gatcaaccgc	ctcaatgcct	ggagatttgg	gcgtgcccc	240
gcgagactgc	tagccgagta	gtgttgggtc	gcgaaaggcc	ttgtgggtact	gcctgatagg	300
gtgcttgcca	gtgccccggg	aggtctcgta	gaccgtgcac	catgagcacg	aatcctaaac	360
ctcaagaaa	aaccaaagg	cgcgccatga	ttgaacaaga	tggtatgcac	gcaggttctc	420
cggccgcttg	gggtggagag	ctattcggtc	atgactgggc	acaacagaca	atcggtctgt	480
ctgatgccgc	cgtgttccgg	ctgtcagcgc	aggggcgcgc	ggttcttttt	gtcaagaccg	540
acctgtccgg	tgccctgaat	gaactgcagg	acgaggcagc	gcggctatcg	tggtgggcca	600

cgacgggctg	tccttgccga	gctgtgctcg	acgttgctac	tgaagcggga	agggactggc	660
tgctattggg	cgaagtgcgc	gggcaggatc	tcctgtcatc	tcaccttgct	cctgccgaga	720
aagtatccat	catggctgat	gcaatgcggc	ggctgcatac	gcttgatccg	gctacctgcc	780
cattcgacca	ccaagcgaaa	catcgcatcg	agcagcgacg	tactcggatg	gaagccgggtc	840
ttgtcgatca	ggatgatctg	gaagaaagac	atcaggggct	cgccgcagcc	gaactgttccg	900
ccaggctcaa	ggcgcgcatg	cccgacggcg	aggatctcgt	cgtgacccat	ggcgatgcct	960
gcttgccgaa	tatcatgggtg	gaaaatggcc	gcttttctgg	attcatcgac	tgtagccggc	1020
tggtgtggc	ggaccgctat	caggacatag	cgttggttac	ccgtgatatt	gctgaagagc	1080
ttggcggcga	atgggctgac	cgcttccctc	tgctttacgg	tatcgccgct	cccgattcgc	1140
agcgcatcgc	cttctatcgc	cttcttgacg	agttcttctg	agtttaaaca	gaccacaacg	1200
gtttccctct	agcgggatca	attccgcccc	tctccctccc	ccccccctaa	cgttactggc	1260
cgaagccgct	tggaataagg	cgggtgtgcg	tttgtctata	tggtattttc	caccatattg	1320
ccgtctctct	gcaatgtgag	ggcccggaag	cctggccctg	tcttcttgac	gagcatctct	1380
aggggtcttt	ccccctctgc	caaaggaatg	caaggtctgt	tgaatgtcgt	gaaggaagca	1440
gttctctctg	aagcttcttg	aagacaaaca	acgtctgtag	cgaccctttg	caggcagcgg	1500
aacccccac	ctggcgacag	gtgcctctgc	ggccaaaagc	cacgtgtata	agatacacct	1560
gcaaaggcgg	cacaaccccc	gtgccacgtt	gtgagttgga	tagttgtgga	aagagtcaaa	1620
tggtctctct	caagcgctatt	caacaaggcg	ctgaaggatg	cccagaagg	accccatgtg	1680
atgggatctg	atctggggcc	tcgggtgcac	tgctttacat	gtgtttagtc	gaggttaaaa	1740
aacgtctagg	ccccccgaac	cacggggacg	tggttttctt	ttgaaaaaca	cgataatacc	1800
atggcgccct	ttacggccct	ctcccaacag	acgcgaggcc	tacttggtcg	catcatcact	1860
agcctcacag	gcccgggacag	gaaccaggct	gagggggagg	tccaagtgg	ctccaccgca	1920
acacaatctt	tcctggcgac	ctgcgtcaat	ggcgtgtgtt	ggactgtcta	tcattggtgcc	1980
ggctcaaaga	ccttgccgg	cccaaaggcg	ccaatcaccc	aatgttacac	aatgtggac	2040
caggacctcg	tcggctggca	agcgcccccc	ggggcgcgct	ccttgacacc	atgcacctgc	2100
ggcagctcgg	acctttactt	ggtcacgagg	catgccgatg	tcattccggt	gcgcggcgcg	2160
ggcgacagca	gggggagcct	actctcccc	aggcccgtct	cctacttgaa	gggctcttcg	2220
ggcgggtccac	tgctctgccc	ctcggggcac	gctgtgggca	tctttcgggc	tgccgtgtgc	2280
acccgagggg	ttgcgaaggc	gggtggactt	gtaccgcgtc	agtctatggg	aaccactatg	2340
cggctcccc	ctttcacgga	caactcgtcc	cctccggcgg	taccgcagac	attccaggtg	2400
gcccattctac	acgcccctac	tggtagcggc	aagagcacta	aggtgccggc	tgcttatgca	2460
gcccagggtg	ataagggtgt	tgctctgaac	ccgtccgtcg	ccgccaccct	aggtttcggg	2520
gcgtatatgt	ctaaggcaca	tggtatcgac	cctaaccatca	gaaccgggg	aaggaccatc	2580
accacgggtg	cccccatcac	gtactccacc	tatggcaagt	ttcttgccga	cggtggttgc	2640
tctggggggc	cctatgacat	cataatatgt	gatgagtgc	actcaactga	ctcgaccact	2700
atcctgggga	tcggcacagt	cctggaccac	cgggagacgg	ctggagcgcg	actcgtcgtg	2760
ctcgccaccg	ctacgcctcc	gggatcgggtc	accgtgccac	atccaaacat	cgaggagggtg	2820
gctctgtcca	gcactggaga	aatccccctt	tatggcaaag	ccatccccat	cgagaccatc	2880
aagggggggg	ggcacctcat	tttctgccc	tccaagaaga	aatgtgatga	gctcgccgcg	2940
aagctgtccg	gcctcggact	caatgctgta	gcatattacc	ggggccttga	tgtatccgtc	3000
ataccaacta	gcggagacgt	cattgtcgta	gcaacggacg	ctctaattgac	gggctttacc	3060
ggcgatttct	actcagtgat	cgactgcaat	acatgtgtca	cccagacagt	cgacttcagc	3120
ctggaccgga	ccttcaccat	tgagacgacg	accgtgccac	aagacgcggg	gtcacgctcg	3180
cagcggcgag	gcaggactgg	taggggcagg	atgggcattt	acaggtttgt	gactccagga	3240
gaacggccct	cgggcatggt	cgattccctc	gttctgtgcg	agtgtatga	cgccgggctgt	3300
gcttggtacg	agctcacgcc	cgccgagacc	tcagttaggt	tgccgggctta	cctaaacaca	3360
ccagggttgc	ccgtctgcca	ggaccatctg	gagttctggg	agagcgtctt	tacagtcctc	3420
acccacatag	acgcccattt	cttgtcccag	actaagcagg	caggagacaa	cttcccctac	3480
ctggtagcat	accaggctac	ggtgtgcgcc	agggctcagg	ctccacctcc	atcgtgggac	3540
caaagtgtga	agtgtctcat	acggctaaag	cctacgctgc	acgggccaac	gcccctgctg	3600
tataggctgg	gagccgttca	aaacgagggt	actaccacac	accccataac	caaatacatc	3660
atggcatgca	tgctcggctga	cctggaggtc	gtcacgagca	cctgggtgct	ggtaggcgga	3720
gtcctagcag	ctctggccgc	gtattgcctg	acaacaggca	gcgtgggtcat	tgtaggcagg	3780
atcatcttgt	ccggaaagcc	ggccatcatt	cccgacaggg	aagtccttta	ccgggagttc	3840
gatgagatgg	aagagtgcgc	ctcacacctc	ccttacatcg	aacagggaat	gcagctcgcc	3900
gaacaattca	aacagaaggc	aatcgggttg	ctgcaaacag	ccaccaagca	agcggagggt	3960
gctgtctccc	tggtggaatc	caagtggcgg	accctcgaag	ccttctgggc	gaagcatatg	4020
tggaatttgc	tcagcgggat	acaatattta	caggcttgtt	ccactctgcc	tggcaacccc	4080
gcgatagcat	cactgatggc	attcacagcc	tctatcacca	gcccgtccac	cacccaacat	4140
accctcctgt	ttaacatcct	gggggggatg	gtggccgccc	aacttgctcc	tcccagcgtc	4200
gcttctgctt	tcgtaggcgc	cggcatcgct	ggagcggctg	ttggcagcat	aggccttggg	4260
aaggtgcttg	tggtatattt	ggcagggtat	ggagcagggg	tgccaggcgc	gctcgtggcc	4320
tttaagggtca	tgagcggcga	gatgccctcc	accgaggacc	tggttaacct	actccctgct	4380
atcctctccc	ctggcgccct	agtcgtcggg	ctcgtgtgcg	cagcgatact	cgctcggcac	4440
gtgggcccag	gggagggggc	tgtgcagttg	atgaaccggc	tgatagcgtt	gccttcgcgg	4500
ggtaaccacg	tctccccac	gcactatgtg	cctgagagcg	acgtgcagc	acgtgtcact	4560

cagatcctct	ctagtcttac	catcactcag	ctgctgaaga	ggcttcacca	gtggatcaac	4620
gaggactgct	ccacgccatg	ctccggctcg	tggctaagag	atgtttggga	ttggatatgc	4680
acggtgttga	ctgatttcaa	gacctggctc	cagtccaagc	tcctgccgcg	attgccggga	4740
gtccccctct	tctcatgtca	acgtgggtac	aagggagctc	ggcggggcga	cggcatcatg	4800
caaaccacct	gcccattgtg	agcacagatc	acgggacatg	tgaaaaaacg	ttccatgagg	4860
atcgtggggc	ctaggacctg	tagtaaacac	tggcatggaa	cattccccc	taacgcgtac	4920
accacggggc	cctgcacgcc	ctccccggcg	ccaaattatt	ctagggcgct	gtggcggggtg	4980
gctgctgagg	agtacgtgga	ggttacgcgg	gtgggggatt	tccactacgt	gacgggcatg	5040
accactgaca	acgtaaagtg	cccgtgtcag	gttccggccc	ccgaattctt	cacagaagtg	5100
gatgggggtg	ggttgacacg	gtacgtcca	gcgtgcaaac	ccctcctacg	ggaggagggtc	5160
acattctctg	tcggtctcaa	tcaataacct	gttgggtcac	agctcccatg	cgagcccgaa	5220
cggacgttag	cagtgtctac	ttccatgctc	accgacccct	cccacattac	ggcggagacg	5280
gctaagcgta	ggctggccag	gggatctccc	ccctccttgg	ccagctcatc	agctatccag	5340
ctgtctgcgc	cttcccttga	ggcaacatgc	actaccgcgc	atgactcccc	ggacgctgac	5400
ctcatcgagg	ccaacctcct	gtggcggcag	gagatgggcg	ggaacatcac	ccgcgtggag	5460
tcagaaaata	aggtagtaat	tttggagctc	ttcgagccgc	tccaagcgga	ggaggatgag	5520
agggaagtat	ccgttccggc	ggagatcctg	cggaggtcca	ggaaattccc	tcgagcgatg	5580
cccatatggg	cagcccgga	ttacaacctc	ccactgttag	agtcctggaa	ggacccggac	5640
tacgtccctc	cagtgttaca	cgggtgtcca	ttgccgcctg	ccaaggcccc	tccgatacca	5700
cctccacgga	ggaagaggac	ggttgtcctg	tcagaatcta	ccgtgtcttc	tgccttggcg	5760
gagctcgcca	caaagacctt	cggcagctcc	gaatcgctcg	ccgtcgacag	cggcacggca	5820
acggcctctc	ctgaccagcc	ctccgacgac	ggcgacgcgg	gatccgacgt	tgagtctgac	5880
tctctcctat	cccccttga	gggggagccg	ggggatcccg	atctcagcga	cgggtcttgg	5940
tctaccgtaa	cggaggaggc	tagtgaggac	gtcgtctgct	gctcgatgtc	ctacacatgg	6000
acaggcgccc	tgatcacgcc	atgcgctgcg	gaggaaacca	agctgcccat	caatgcactg	6060
agcaactctt	tgctccgtca	ccacaacttg	gtctatgcta	caacatctcg	cagcgcaagc	6120
ctgcggcaga	agaaggtcac	ctttgacaga	ctgcaggtcc	tggacgacca	ctaccgggac	6180
gtgctcaagg	agatgaaggc	gaaggcgctc	acagttaagg	ctaaacttct	atccgtggag	6240
gaagcctgta	agctgacgcc	cccacattcg	gccagatcta	aatttggcta	tggggcaaaag	6300
gacgtccgga	acctaaccag	caaggccgtt	aaccacatcc	gctccgtgtg	gaaggacttg	6360
ctggaagaca	ctgagacacc	aattgacacc	accatcatgg	caaaaaatga	ggttttctgc	6420
gtccaaccag	agaagggggg	ccgcaagcca	gctcgcctta	tcgtattccc	agatttgggg	6480
gttcgtgtgt	gcgagaaaat	ggccctttac	gatgtggtct	ccaccctccc	tcaggccgtg	6540
atgggctcct	catacggatt	ccaatactct	cctggacagc	gggtcgagtt	cctgggtgaat	6600
gcctggaaat	cgaagaaatg	ccctatgggc	ttcgcataatg	acaccgcgtg	ttttgcttca	6660
acggtcactg	agaatgacat	ccgtgttgag	gagtcaatct	accaatgttg	tgacttggcc	6720
cccgaagcca	gacaggccat	aaggtcgctc	acagagcggc	tttacatcgg	gggccccctg	6780
actaattcta	aagggcagaa	ctgcggctat	cgccggtgcc	gcgcgagcgg	tgtactgacg	6840
accagctgcg	gtaataccct	cacatgtttac	ttgaaggccg	ctgcggcctg	tcgagctgcg	6900
aagctccagg	actgcacgat	gctcgtatgc	ggagacgacc	ttgtcgttat	ctgtgaaagc	6960
gcggggaccc	aagaggacga	ggcgagccta	cgggccttca	cggaggctat	gactagatag	7020
tctgcccccc	ctggggaccc	gccccaaacca	gaatacgact	tggagttagat	aacatcatgc	7080
tcttccaatg	tgctcagtcg	gcacgatgca	tctggcaaaa	gggtgtacta	tctcaccctg	7140
gacccccacca	cccccccttg	gcgggctgcg	tgggagacag	ctagacacac	tccagtcaat	7200
tcttggttag	gcaacatcat	catgtatgcg	cccaccttgt	gggcaaggat	gatacctgatg	7260
actctattct	tctccattct	tctagctcag	gaacaacttg	aaaaagccct	agattgtcag	7320
atctacgggg	cctgttactc	cattgagcca	cttgacctac	ctcagatcat	tcaacgactc	7380
catggcctta	gcgcattttc	actccatagt	tactctccag	gtgagatcaa	taggggtggct	7440
tcatgcctca	ggaaacttgg	ggtaccgccc	ttgcgagtct	ggagacatcg	ggccagaagt	7500
gtccgcgcta	ggctactgtc	ccaggggggg	agggctgcca	cttgtggcaa	gtacctcttc	7560
aactgggcag	taaggaccaa	gctcaaactc	actccaatcc	cggctgcgtc	ccagttggat	7620
ttatccagct	ggttcgttgc	tggttacagc	gggggagaca	tatatcacag	cctgtctcgt	7680
gcccgaaccc	gctgggttcat	gtgggtgccta	ctcctacttt	ctgtaggggt	aggcatctat	7740
ctactcccca	accgatgaac	ggggacctaa	acactccagg	ccaataggcc	atcctgtttt	7800
tttccctttt	tttttttctt	tttttttttt	tttttttttt	tttttttttt	ttctcctttt	7860
tttttctctt	ttttttcctt	ttctttcctt	tgggtggctcc	atcttagccc	tagtcacggc	7920
tagctgtgaa	aggtccgtga	gccgcttgac	tgcagagagt	gctgatactg	gcctctctgc	7980
agatcaagta	ctcctgcagg	cgcgccacta	tgtgggaatac	gcgggggtatg	ccgcgtttta	8040
gcatattgac	gacccaattc	tcatgtttga	cagcttatca	tcgataagct	ttaatgcggg	8100
agttttatcac	agttaaattg	ctaacgcagt	caggcaccgt	gtatgaaatc	taacaatgcg	8160
ctcatcgtea	tctcgggcac	cgtcacccctg	gatgctgtag	gcataggctt	ggttatgccg	8220
gtactgcccg	gcctcttgcg	ggatatcgctc	cattccgcga	gcatcgccag	tcactatggc	8280
gtgctgtcat	cgctatatgc	gttgatgcaa	tttctatgcg	cacccggtct	cggagcatcg	8340
tccgacccgt	ttggccgcgg	cccgctcctg	ctcgtttcgc	tacttggagc	cactatcgac	8400
tacgcgatca	tggcgaccac	acccgtcctg	tggatcctct	acgccggacg	catcggtggc	8460
ggcatcaccg	gcgccacagg	tgcggttgct	ggcgccctata	tcgccgacat	caccgatggg	8520

gaagatcggg	ctcgccactt	cgggctcatg	agcgcttggt	tcggcggtgg	tatgggtggca	8580
ggccccgtgg	ccgggggact	gttggggcgc	atctccttgc	atgcaccatt	ccttgccggcg	8640
gcggtgctca	acggcctcaa	cctactactg	ggctgcttcc	taatgcagga	gtcgcataag	8700
ggagagcgtc	gaccgatgcc	cttgagagcc	ttcaaccacg	tcagctcctt	ccgggtgggcg	8760
cggggcatga	ctatcggtgg	ggcacttatg	actgtcttct	ttatcatgca	actcgtagga	8820
caggtgccgg	cagcgctctg	ggcatttttc	ggcgaggacc	gctttcgctg	gagcgcgacg	8880
atgatcggcc	tgctcgcttg	ggatttcgga	atcttgcaacg	ccctcgctca	agccttcgtc	8940
actggtcccg	ccaccaaacg	tttcggcgag	aagcaggcca	ttatcgccgg	catggcgggc	9000
gacgcgctgg	gctacgtctt	gctggcgctt	gcgacgcgag	gctggatggc	cttccccatt	9060
atgattcttc	tcgcttccgg	cggcatcggg	atgcccgcgt	tcgaggccat	gctgtccagg	9120
caggtagatg	acgaccatca	gggacagctt	caaggatcgc	tcgcggtctt	taccagccta	9180
acttcgatca	ctggaccgct	gatcgctcacg	gcgatttatg	ccgcctcggc	gagcacatgg	9240
aacgggttgg	catggattgt	aggcgcgccg	ctataccttg	tctgcctccc	cgcgttgctg	9300
cgcggtgcat	ggagccgggg	cacctcgacc	tgaatggaag	ccggcgggcac	ctcgctaacc	9360
gattcaccac	tccaagaatt	ggagccaatc	aattcttgcg	gagaactgtg	aatgcgcaaa	9420
ccaacccttg	gcagaacata	tccatcgctg	ccgccatctc	cagcagccgc	acgcggcgca	9480
tctcgggcag	cgttgggtcc	tggccacggg	tgcgcatgat	cgtgctcctg	tcgttgagga	9540
cccggctagg	ctggcggggg	tgcccttactg	gttagcagaa	tgaatcaccg	atacgcgagc	9600
gaacgtgaag	cgactgctgc	tgcaaaacgt	ctgcgacctg	agcaacaaca	tgaatgggtc	9660
tcggtttccg	tgtttcgtaa	agtctggaaa	cgcggaagtc	agcgccctgc	accattatgt	9720
tccggatctg	catcgcgagg	tgctgctggc	tacctgtggt	aacacctaca	tctgtattaa	9780
cgaagcgtg	gcattgacct	tgagtgattt	ttctctggtc	ccgccgcac	cataccgcca	9840
gttggtttacc	ctcacaacgt	tccagtaaac	gggcatgttc	atcatcagta	accgcgtatc	9900
tgagcatcct	ctctcgcttc	atcggtatca	ttacccccat	gaacagaaat	tcccccttac	9960
acggaggcat	caagtgaacca	aacaggaaaa	aaccgccctt	aacatggccc	gcttttatcag	10020
aagccagaca	ttaacgcttc	tggagaaact	caacgagctg	gacgcggatg	aacaggcgag	10080
catctgtgaa	tcgcttcacg	accacgctga	tgagctttac	cgcagctgcc	tcgcgcggtt	10140
cgggtgatgac	ggtgaaaaac	tctgacacat	gcagctcccc	gagacggtca	cagcttgtct	10200
gtaagcggat	gccggggagca	gacaagcccc	tcagggcgcg	tcagcgggtg	ttggcgggtg	10260
tcggggcgca	gccatgacct	agtcacgtag	cgatagcgga	gtgtatactg	gcttaactat	10320
gcggcatcag	agcagattgt	actgagagtg	caccatattg	ggtgtgaaat	accgcacaga	10380
tgcgtaagga	gaaaataacc	catcaggcgc	tcttccgctt	cctcgctcac	tgactcgctg	10440
cgctcggctg	ttcggctgct	gcgagcggta	tcagctcact	caaaggcggt	aatacgggtta	10500
tccacagaat	caggggataa	cgcaggaaa	aacatgtgag	caaaaggcca	gcaaaaggcc	10560
aggaaccgta	aaaaggccgc	gttgctggcg	ttttcccata	ggctccgcgc	ccctgacgag	10620
catcacaaaa	atcgacgtc	aagtcagagg	tggcgaaacc	cgacaggact	ataaagatac	10680
caggcgcttc	ccccctgga	ctccctcgct	cgctctcctg	ttccgaccct	gccgcttacc	10740
ggatacctgt	ccgcctttct	cccttcggga	agcgtggcgc	tttctcatag	ctcacgctgt	10800
aggtatctca	gttcgggtgta	ggtcggtcgc	tccaagctgg	gctgtgtgca	cgaaccccc	10860
gttcagcccc	accgctgcgc	cttatccggt	aactatcgct	ttgagtccaa	cccggtaaga	10920
cacgacttat	cgccactggc	agcagccact	ggtaacagga	ttagcagagc	gaggtatgta	10980
ggcggtgcta	cagagttctt	gaagtgggtg	cctaactacg	gctacactag	aaggacagta	11040
tttggtatct	gcgctctgct	gaagccagtt	accttcggaa	aaagagttgg	tagctcttga	11100
tccggcaaac	aaaccaccgc	tggtagcggg	ggtttttttg	tttgcaagca	gcagattacg	11160
cgcagaaaaa	aaggatctca	agaagatcct	ttgatctttt	ctacgggggtc	tgacgctcag	11220
tggaaacgaaa	actcacgtta	agggattttg	gtcatgagat	tatcaaaaag	gatcttcacc	11280
tagatccttt	tctagataat	acgactcact	ata			11313

<210> 10
 <211> 11313
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Plasmid

<400> 10						
gccagcccc	gattggggggc	gacactccac	catagatcac	tcccctgtga	ggaactactg	60
tcttcacgca	gaaagcgtct	agccatggcg	ttagtatgag	tgctcgtcag	cctccaggac	120
ccccctccc	gggagagcca	tagtgggtctg	cggaaaccgt	gagtaacacc	gaattgccag	180
gacgaccggg	tcctttcttg	gatcaaccgc	ctcaatgcct	ggagattttg	gcgtgcccc	240
gcgagactgc	taccccgagta	gtgttgggtc	gcgaaaaggcc	ttgtgggtact	gcctgatagg	300
gtgcttgcca	gtgccccggg	aggtctcgta	gaccgtgcac	catgagcacg	aatcctaaac	360
ctcaaagaaa	aaccaaaagg	cgcgccatga	ttgaacaaga	tggattgcac	gcaggttctc	420

cgcccgcttg	ggtggagagg	ctattcggct	atgactgggc	acaacagaca	atcggctgct	480
ctgatgccgc	cgtgttccgg	ctgtcagcgc	aggggcccgc	ggttcttttt	gtcaagaccg	540
acctgtccgg	tgcctgaat	gaactgcagg	acgaggcagc	gcggctatcg	tggctggcca	600
cgacgggcgt	tccttgccga	gctgtgctcg	acgttgtcac	tgaagcggga	agggactggc	660
tgctattggg	agaagtgcgc	gggcaggatc	tcctgtcacc	tcaccttgcg	cctggccgag	720
aagtatccat	catggctgat	gcaatgcggc	ggctgcatac	gcttgatccg	gctacctgcc	780
cattcgacca	ccaagcgaaa	catcgcatcg	agcgagcagc	tactcggatg	gaagccggtc	840
ttgtcgatca	ggatgatctg	gacgaagagc	atcaggggct	cgcgccagcc	gaactgttcg	900
ccaggctcaa	ggcgcgcag	cccagcggcg	aggatctcgt	cgtgacctat	ggcgatgcct	960
gcttgccgaa	tatcatgggtg	gaaaatggcc	gcttttctgg	attcatcgac	tgtggccggc	1020
tgggtgtggc	ggaccgctat	caggacatag	cgttggctac	ccgtgatatt	gctgaagagc	1080
ttggcggcga	atgggtcgac	cgttctctcg	tgctttacgg	tatcgccgct	cccgattcgc	1140
agcgcatcgc	cttctatcgc	cttcttgacg	agttcttctg	agtttaaaaca	gaccacaacg	1200
gtttccctct	agcgggatca	attccgcccc	tctccctccc	ccccccctaa	cgttactggc	1260
cgaagccgct	tggataaagg	ccggtgtgcg	tttgtctata	tgttattttc	caccatattg	1320
ccgtcttttg	gcaatgtgag	ggcccggaaa	cctggccctg	tcttcttgac	gagcattcct	1380
aggggtcttt	cccctctcgc	caaaggaatg	caaggtctgt	tgaatgtcgt	gaaggaagca	1440
gttctctctg	aagcttcttg	aagacaaaaca	acgtctgtag	cgaccttttg	cgaccagcgg	1500
aacccccccac	ctggcgacag	gtgcctctgc	ggccaaaagc	cacgtgtata	agatacacct	1560
gcaaaggcgg	cacaacccca	gtgccacgtt	gtgagttgga	tagttgtgga	aagagtcaaa	1620
tggctctcct	caagcgtatt	caacaagggg	ctgaaggatg	cccagaagg	accccatattg	1680
atgggatctg	atctggggcc	tcggtgcaca	tgctttacat	gtgttttagtc	gaggttaaaa	1740
aacgtctagg	ccccccgaac	cacggggacg	tggttttctc	ttgaaaaaca	cgataatacc	1800
atggcgctga	ttacggccta	ctcccaacag	acgcgaggcc	tacttggctg	catcatcact	1860
agcctcacag	gcccggacag	gaaccaggtc	gagggggagg	tccaagtggg	ctccaccgca	1920
acacaatctt	tcctggcgac	ctgcgtcaat	ggcgtgtgtt	ggactgtcta	tcattgggtgc	1980
ggctcaaaga	cccttgccgg	cccaaagggc	ccaatcaccc	aaatgtacac	caatgtggac	2040
caggacctcg	tcggctggca	agcgcctccc	ggggcgcggt	ccttgacacc	atgcacctgc	2100
ggcagctcgg	acgtttactt	ggtcacgagg	catgccgatg	tcattccggg	gcgcggcg	2160
ggcgacagca	gggggagcct	actctcccc	aggcccgctc	cctacttgaa	gggctcttcg	2220
ggcgggtccac	tgctctgccc	ctcggggcac	gctgtgggca	tctttcgggc	tgccgtgtgc	2280
acccgagggg	ttgcgaaggc	ggtggacttt	gtaccgcgtc	agtctatggg	aaccactatg	2340
cggctccccg	tcttcacgga	caactcgtcc	cctccggccg	taccgcagac	attccagggtg	2400
gccccatctac	acgcccctac	tggtagcggc	aagagcacta	aggtgccggc	tgcgatatgca	2460
gcccgaaggg	ataagggtgt	tgtcctgaac	cgcctcgtcg	ccgccaccct	aggtttcggg	2520
gcgatatatgt	ctaaggcaca	tggtatcgac	cctaaccatca	gaaccggggg	aaggaccatc	2580
accacgggtg	cccccatcac	gtactccacc	tatggcaagt	ttcttgccga	cgggtggttgc	2640
tctggggggcg	cctatgacat	cataatatgt	gatgagtgcc	actcaactga	ctcgaccact	2700
atcctggggca	tcggcacagt	cctggaccaa	gcggagacgg	ctggagcgcg	actcgtcgtg	2760
ctcgccaccg	ctacgcctcc	gggatcgggt	accgtgccac	atccaaacat	cgaggagggtg	2820
gctctgtcca	gcactggaga	aatccccctt	tatggcgaag	ccatccccat	cgagaccatc	2880
aagggggggga	ggcacctcat	tttctgccat	tccaagaaga	aatgtgatga	gctcgcccg	2940
aagctgtccg	gcctcggact	caatgctgta	gcatattacc	ggggccttga	tgtatccgtc	3000
ataccaacta	gcggagacgt	cattgtcgta	gcaacggacg	ctctaataac	gggctttacc	3060
ggcgatttcg	actcagtgat	cgactgcaat	acatgtgtca	cccagacagt	cgacttcagc	3120
ctggaccgca	ccttcaccat	tgagacgacg	accgtgccac	aagacgcggg	gtcacgctcg	3180
cagcggcgag	gcaggactgg	taggggcagg	atgggcattt	acaggtttgt	gactccagga	3240
gaacggccct	cgggcatggt	cgattcctcg	gttctgtgcg	agtgtctatga	cgcgggctgt	3300
gcttggtacg	agctcacgcc	cgccgagacc	tcagttaggt	tgccgggctta	cctaacaaca	3360
ccagggttgc	ccgtctgcca	ggaccatctg	gagttctggg	agagcgtctt	tacaggcctc	3420
accacacatag	acgcccattt	cttgtcccag	actaagcagg	caggagacaa	cttcccctac	3480
ctggtagcat	accaggctac	ggtgtgcgcc	agggctcagg	ctccacctcc	atcgtgggac	3540
caaagtgtga	agtgtctcat	acggctaaaag	cctacgtcgc	acggggccaac	gcccctgctg	3600
tataggctgg	gagccgttca	aaacgaggtt	actaccacac	accccataac	caaatacatc	3660
atggcatgca	tgtagctga	cctggaggtc	gtcacgagca	cctgggtgct	ggtaggcgga	3720
gtcctagcag	ctctggccgc	gtattgcctg	acaacaggca	gcgtgggtcat	tgtgggcagg	3780
atcatcttgt	ccggaaaagcc	ggccatcatt	cccgacaggg	aagtctttta	ccgggagttc	3840
gatgagatgg	aagagtgcgc	ctcacacctc	ccttacatcg	aacggggaat	gcagctcgcc	3900
gaacatttca	aacagaaggc	aatcgggttg	ctgcaaacag	ccaccaagca	agcggaggct	3960
gctgctcccg	cgggtggaatc	caagtggcgg	accctcgaag	ccttctgggc	gaagcatatg	4020
tggaaatttca	tcagcgggat	acaatattta	gcaggcttgt	ccactctgcc	tggcaacccc	4080
gcgatagcat	cactgatggc	attcacagcc	tctatcacca	gcccgcctcac	cacccaacat	4140
acccctcctgt	ttaacatcct	ggggggatgg	gtggccgcgc	aacttgctcc	tcccagcgtc	4200
gcttctgctt	tcgatggcgc	cggcatcgct	ggagcgggct	ttggcagcat	agggcctggg	4260
aaggtgcttg	tggatatttt	ggcaggttat	ggagcggggg	tggcagggcg	gctcgtggcc	4320
tttaagggtca	tgagcggcga	gatgcctccc	accgaggacc	tggttaacct	actccctgct	4380

atcctctccc	ctggcgccct	agtcgtcggy	gtcgtgtgcy	cagcgatact	gcgtcggcac	4440
gtgggcccag	gggagggggc	tgtgcagtgg	atgaaccggc	tgatagcggt	cgcttcgcgg	4500
ggtaaccacg	tctccccac	gcactatgtg	cctgagagcg	acgctgcagc	acgtgtcact	4560
cagatcctct	ctagtcttac	catcactcag	ctgctgaaga	ggcttcacca	gtggatcaac	4620
gaggactgct	ccacgccatg	ctccggctcg	tggctaagag	atgtttggga	ttggatatgc	4680
acggtgttga	ctgatttcaa	gacctggctc	cagttccaagc	tcctgccgcy	attgccggga	4740
gtccccctct	tctcatgtca	acgtgggtac	aagggagtct	ggcggggcga	cggcatcatg	4800
caaaccacct	gcccattgtg	agcacagatc	accggacatg	tgaaaaacgg	ttccatgagg	4860
atcgtggggc	ctaggacctg	tagtaaacacg	tggcatggaa	cattccccat	taacgcgtac	4920
accacggggc	cctgcacgcc	ctccccggcy	ccaaattatt	ctagggcgct	gtggcggggtg	4980
gctgctgagg	agtacgtgga	ggttacgcgg	gtgggggatt	tccactacgt	gacgggcatg	5040
accactgaca	acgtaaagtg	cccggtgtcag	gttccggccc	ccgaattctt	cacagaagtg	5100
gatgggggtg	ggttgcacag	gtacgctcca	gcgtgcaaac	ccctcctacg	ggaggagggtc	5160
acatttcttg	tcgggctcaa	tcaatacctg	gttgggtcac	agctcccatg	cgagcccgaa	5220
ccggacgtag	cagtgtctac	ttccatgtct	accgacccct	cccacattac	ggcggagacg	5280
gctaagcgta	ggctggccag	gggatctccc	ccctccttgg	ccagctcatc	agctagccag	5340
ctgtctgcgc	cttcttgaa	ggcaacatgc	actaccgctc	atgactcccc	ggacgtgcag	5400
ctcatcgagg	ccaacctcct	gtggcggcag	gagatgggcy	ggaacatcac	ccgcgtggag	5460
tcagaaaata	aggtagtaat	tttggactct	ttcgagccgc	tccaagcggga	ggaggatgag	5520
agggaagtat	ccgttccggc	ggagatcctg	cggaggtcca	ggaaattccc	tcgagcgatg	5580
cccatatggg	cacgcccggga	ttacaaccct	ccactgttag	agtcctggaa	ggacccggac	5640
tacgtccctc	cagtggtaca	cgggtgtcca	ttgccgcctg	ccaaggcccc	tccgatacca	5700
cctccacgca	ggaagaggac	ggttgcctct	tcagaattca	ccgtgtcttc	tgccttggcg	5760
gagctcgcca	caaagacctt	cggcagctcc	gaatcgctcg	ccgtcgacag	cggcacggca	5820
acggcctctc	ctgaccagcc	ctccgacgac	ggcgacgcgg	gatccgacgt	tgagtcgtac	5880
tcctccatgc	cccccttga	gggggagccg	ggggatcccc	atctcagcga	cgggtccttg	5940
tctaccgtaa	gcgaggaggc	tagtgaggac	gtcgtctgct	gctcgatgtc	ctacacatgg	6000
acaggcgccc	tgatcacgcc	atgcgctgcy	gaggaaacca	agctgcccac	caatgcactg	6060
agcaactctt	tgctccgtca	ccacaacttg	gtctatgcta	caacatctcg	cagcgcaagc	6120
ctgcggcaga	agaaggtcac	ctttgacaga	ctgcaggctc	tggacgacca	ctaccgggac	6180
gtgctcaagg	agatgaaggc	gaaggcgctc	acagttaagg	ctaaacttct	atccgtggag	6240
gaagcctgta	agctgacgcc	cccacattcg	gccagatcta	aattttggcta	tggggcaaa	6300
gacgtccgga	acctatccag	caaggccgtt	aaccacatcc	gctccgtgtg	gaaggacttg	6360
ctggaagaca	ctgagacacc	aattgacacc	accatcatgg	caaaaaatga	ggttttctgc	6420
gtccaaccag	agaagggggg	cgcgaagcca	gctgccttta	tcgtattccc	agattttggg	6480
gttcgtgtgt	gcgagaaaat	ggccctttac	gatgtggtct	ccaccctccc	tcaggccgtg	6540
atgggctctt	catacggatt	ccaatactct	cctggacagc	gggtcgagtt	cctgggtgaat	6600
gcctggaaag	cgaagaaatg	ccctatgggc	ttcgcatatg	acaccgcgtg	ttttgactca	6660
acgggtcactg	agaatgacat	ccgtgttgag	gagtcaatct	accaatgttg	tgacttggcc	6720
cccgaagcca	gacaggccat	aaggctcgct	acagagcggc	tttacatcgg	gggccccctg	6780
actaatctta	aagggcagaa	ctgcggctat	cgcgggtgcc	gcgcgagcgg	tgtactgacg	6840
accagctgcy	gtaataccct	cacatgttac	ttgaaggccg	ctgcggcctg	tcgagctgcy	6900
aagctccagg	actgcacgat	gctcgtatgc	ggagacgacc	ttgtcgttat	ctgtgaaagc	6960
gcggggaccc	aagaggacga	ggcgagccta	cgggccttca	cggaggctat	gactagatac	7020
tctgcccccc	ctggggaccc	gccc aaacca	gaatacgact	tggagttagt	aacatcatgc	7080
tcctccaatg	tgctagtcgc	gcacgatgca	cttggcaaaa	gggtgtacta	tctcaccctg	7140
gaccccaacca	cccccttgc	cggggctgcy	tgggagacag	ctagacacac	tcagtcgaat	7200
tcctggctag	gcaacatcat	catgtatgcy	cccaccttgt	gggcaaggat	gatcctgatg	7260
actcatttct	tctccatcct	tctagctcag	gaacaacttg	aaaaagccct	agattgtcag	7320
atctacgggg	cctgttactc	cattgagcca	cttgacctac	ctcagatcat	tcaacgactc	7380
catggcctta	gcgcattttc	actccatagt	tactctccag	gtgagatcaa	taggggtggct	7440
tcacgcctca	ggaaacttgg	ggtaccgccc	ttgcgagtct	ggagacatcg	ggcagaagt	7500
gtccgcgcta	ggctactgtc	ccaggggggg	agggctgcca	cttgtggcaa	gtacctcttc	7560
aactgggcag	taaggaccaa	gctcaaaactc	actccaatcc	cggctgcgtc	ccagttggat	7620
ttatccagct	ggttcgttgc	tggttacagc	gggggagaca	tatatcacag	cctgtctcgt	7680
gcccgaaccc	gctggttcat	gtggtgccta	ctcctacttt	ctgtaggggt	aggcatctat	7740
ctactcccca	accgatgaac	ggggaccta	acactccagg	ccaataggcc	atcctgtttt	7800
tttccctttt	tttttttctt	tttttttttt	tttttttttt	tttttttttt	ttctctcttt	7860
tttttctctt	tttttctctt	ttcttttctt	tgggtggctcc	atcttagccc	tagtcacggc	7920
tagctgtgaa	aggtccgtga	gccgcttgac	tgcagagagt	gctgatactg	gcctctctgc	7980
agatcaagta	ctcctgcagg	cgcgccacta	gtgggaatac	gcgggggtatg	ccgcgtttta	8040
gcatattgac	gacccaattc	tcatgtttga	cagcttatca	tcgataagct	ttaatgcggt	8100
agtttatcac	agttaaattg	ctaacgcagt	caggcaccgt	gtatgaaatc	taacatgcg	8160
ctcatcgcca	tcctcggcac	cgtaaccctg	gatgctgtag	gcataggcct	ggttatggcg	8220
gtactgccgg	gcctcttgcy	ggatatcgct	cattccgaca	gcacgcggag	tcactatggc	8280
gtgctgctag	cgctatatgc	gttgatgcaa	tttctatgcy	cacccttctt	cggagcactg	8340

tccgaccgct	ttggccgcgc	cccagtcctg	ctcgcttcgc	tacttggagc	cactatcgac	8400
tacgcgatca	tggcgaccac	acccgtcctg	tggatcctct	acgccggacg	catcgtggcc	8460
ggcatcaccg	gcgccacagg	tgcggttgct	ggcgccctata	tcgccgacat	caccgatggg	8520
gaagatcggg	ctcgccactt	cgggctcatg	agcgcttggt	tcggcgtggg	tatggtggca	8580
ggccccgtgg	ccgggggact	gttgggcgcc	atctccttgc	atgcaccatt	ccttggggcg	8640
gcggtgctca	acggcctcaa	cctactactg	ggctgcttcc	taatgcagga	gtcgcataag	8700
ggagagcgtc	gaccgatgcc	cttgagagcc	ttcaacccag	tcagctcctt	ccggtgggcg	8760
cggggcatga	ctatcgtcgc	cgcacttatg	actgtcttct	ttatcatgca	actcgttaga	8820
caggtgccgg	cagcgctctg	ggtcattttc	ggcgaggacc	gctttcgctg	gagcgcgacg	8880
atgatcgccc	tgctcgcttg	ggtattcgga	atcttgacag	ccctcgctca	agccttcgtc	8940
actggtcccc	ccaccaaacy	tttcggcgag	aagcaggcca	ttatcgccgg	catggcgggc	9000
gacgcgctgg	gctacgtctt	gctggcgctt	gcgacgcgag	gctggatggc	cttccccatt	9060
atgattcttc	tcgcttccgg	cggcatcggg	atgcccgctg	tcgaggccat	gctgtccagg	9120
caggtagatg	acgaccatca	gggacagctt	caaggatcgc	tcgcggtctt	taccagccta	9180
acttcgatca	ctggaccgct	gatcgtcacg	gcgatttatg	ccgcctcggc	gagcacatgg	9240
aacgggttgg	catggattgt	aggcgccgcc	ctataccttg	tctgcctccc	cgcgttgctg	9300
cgcggtgcac	ggagccgggc	cacctcgacc	tgaatggaag	ccggcgggac	ctcgctaacy	9360
gattcaccac	tccaagaatt	ggagccaatc	aattcttgcg	gagaactgtg	aatgcgcaaa	9420
ccaacccttg	gcagaacata	tccatcgctg	ccgccatctc	cagcagccgc	acgcggcgca	9480
tctcgggcag	cgttgggtcc	tggccacggg	tgcgcatgat	cgtgctcctg	tcggtgagga	9540
cccggctagg	ctggcggggg	tgccttactg	gttagcagaa	tgaatcaccg	atacgcgagc	9600
gaacgtgaag	cgactgctgc	tgcaaaacgt	ctgcgacctg	agcaacaaca	tgaatggtct	9660
tcggtttccg	tgtttcgtaa	agtctggaaa	cgcggaagtc	agcgccctgc	accattatgt	9720
tccggatctg	catcgagga	tgctgctggc	taccctgtgg	aacacctaca	tctgtattaa	9780
cgaagcgctg	gcattgaccc	tgagtgattt	ttctctggtc	ccgccgcata	cataccgcca	9840
gttggtttacc	ctcacaacgt	tccagtaacc	gggcatgttc	atcatcagta	acccgtatcg	9900
tgagcatcct	ctctcgtttc	atcggtatca	ttacccccat	gaacagaaat	tcccccttac	9960
acggagggac	caagtgaaca	aacaggaaaa	aaccgccttt	aacatggccc	gctttatcag	10020
aagccagaca	ttaacgcttc	tggagaaaact	caacgagctg	gacgcggatg	aacacgcaga	10080
catctgtgaa	tcgcttcacg	accacgctga	tgagctttac	cgcagctgcc	tcgcgcgttt	10140
cggatgatgac	ggtgaaaacc	tctgacacat	gcagctcccc	gagacgggtc	cagcttgtct	10200
gtaagcggat	gccggggagca	gacaagcccc	tcagggcgcg	tcagcgggtg	ttggcgggtg	10260
tcggggcgca	gccatgaccc	agtcacgtag	cgatagcgga	gtgtatactg	gcttaactat	10320
gcggcatcag	agcagattgt	actgagagtg	caccatatgc	ggtgtgaaat	accgcacaga	10380
tgcgtaagga	gaaaataacc	catcaggcgc	tcttcgcgtt	cctcgctcac	tgactcgctg	10440
cgctcggtcg	ttcggtcgcg	gcgagcggtg	tcagctcact	caaaggcggt	aatacgggtta	10500
tccacagaat	caggggataa	cgcaggaaaag	aacatgtgag	caaaaggcca	gcaaaaggcc	10560
aggaaccgta	aaaaggccgc	gttgctggcg	tttttccata	ggctccgccc	ccctgacgag	10620
catcacaaaa	atcgacgctc	aagtcagagg	tggcgaaacc	cgacaggact	ataaagatac	10680
caggcgtttc	cccctggaaag	ctccctcgctg	cgctctcctg	ttccgaccct	gccgcttacc	10740
ggatacctgt	ccgcctttct	cccttcggga	agcgtggcgc	tttctcatag	ctcacgctgt	10800
aggtatctca	gttcgggtgta	ggtcgctcgc	tccaagctgg	gctgtgtgca	cgaaccccc	10860
gttcagcccc	accgctgcgc	cttatccggt	aactatcgtc	ttgagtccaa	cccggtaaga	10920
cacgacttat	cgccactggc	agcagccact	ggtaacagga	ttagcagagc	gaggtatgta	10980
ggcggtgcta	caagattctt	gaagtgggtg	cctaactacg	gctacactag	aaggacagta	11040
tttggtatct	gcgctctgct	gaagccagtt	accttcggaa	aaagagttgg	tagctcttga	11100
tccggcaaac	aaaccaccgc	tggtagcggg	ggtttttttg	tttgcaagca	gcagattacg	11160
cgcagaaaaa	aaggatctca	agaagatcct	ttgatctttt	ctacgggggtc	tgacgctcag	11220
tggaaacgaaa	actcacgtta	agggattttg	gtcatgagat	tatcaaaaag	gatcttcacc	11280
tagatccttt	tctagataat	acgactcact	ata			11313

<210> 11

<211> 11184

<212> DNA

<213> Artificial Sequence

<220>

<223> Plasmid

<400> 11

gccagccccc	gattgggggg	gacactccac	catagatcac	tcccctgtga	ggaactactg	60
tcttcacgca	gaaagcgctc	agccatggcg	ttagtatgag	tgctcgtcag	cctccaggac	120
ccccctccc	gggagagcca	tagtggtctg	cggaaaccgg	gagtaaccgc	gaattgccag	180
gacgaccggg	tcctttcttg	gatcaaaccc	ctcaatgcct	ggagatttgg	gcgtgcccc	240

gcgagactgc	tagccgagta	gtgttgggtc	gcgaaaggcc	ttgtgggtact	gcctgatagg	300
gtgcttgcca	gtgccccggg	aggtctcgt	gaccgtgcac	catgagcacg	aatcctaaac	360
ctcaaagaaa	aaccaaagg	cgcccatga	ttgaacaaga	tggattgcac	gcagggtctc	420
cgcccgcttg	ggtggagagg	ctattcggct	atgactgggc	acaacagaca	atcggctgct	480
ctgatccgc	cgtgtccgg	ctgtcagcgc	aggggcgcgc	ggttcttttt	gtcaagaccg	540
acctgtccgg	tgccctgaat	gaactgcagg	acgaggcagc	gcggctatcg	tggctggcca	600
cgacgggctg	tccttgccga	gctgtgctcg	acgttgtcac	tgaagcggga	agggactggc	660
tgctattggg	cgaagtgcgc	gggcaggatc	tcctgtcatc	tcaccttgct	cctgccgaga	720
aagtatccat	catggctgat	gcaatgcggc	ggctgcatac	gcttgatccg	gctacctgcc	780
cattcgacca	ccaagcgaaa	catcgcatcg	agcgagcacg	tactcggatg	gaagccggtc	840
ttgtcgatca	ggatgatctg	gacgaagagc	atcaggggct	cgcgccagcc	gaactgttcg	900
ccaggctcaa	ggcgccgatg	cccgacggcg	aggatctcgt	cgtgacctat	ggcgatgcct	960
gcttgccgaa	tatcatgggtg	gaaaatggcc	gcttttctgg	attcatcgac	tgtggccggc	1020
tgggtgtggc	ggaccgctat	caggacatag	cgttggctac	ccgtgatatt	gctgaagagc	1080
ttggcggcga	atgggctgac	cgcttcctcg	tgctttacgg	tatcgccgct	cccgatctgc	1140
agcgcatccg	cttctatcgc	cttcttgagc	agttcttctg	agttttaaaca	gaccacaacg	1200
gtttccctct	agcgggatca	attccgcccc	tcctccctccc	ccccccctaa	cgttactggc	1260
cgaagccgct	tggataaagg	ccgggtgtgcg	tttgtctata	tgttattttc	caccataattg	1320
ccgtcttttg	gcaatgtgag	ggcccggaaa	cctggccctg	tcctcttgac	gagcattcct	1380
aggggtcttt	cccctctcgc	caaagggaatg	caaggctctgt	tgaatgtcgt	gaagggaagca	1440
gttccctctg	aagcttcttg	aagacaaaca	acgtctgtag	cgaccctttg	caggcagcgg	1500
aacccccccac	ctggcgacag	gtgcctctgc	ggccaaaagg	cacgtgtata	agatacacct	1560
gcaaaggcgg	cacaacccca	gtgccacgtt	gtgagtggga	tagttgtgga	aagagtcaaaa	1620
tggctctcct	caagcgtatt	caacaagggg	ctgaaggatg	cccagaagg	acccatttgt	1680
atgggatctg	atctggggcc	tcgggtgcaca	tgctttacat	gtgttttagtc	gagggtaaaa	1740
aacgtctagg	ccccccgaac	cacggggacg	tggttttctc	ttgaaaaaca	cgataataacc	1800
atggcgcccta	ttacggccta	ctcccaacag	acgcgaggcc	tacttggtcg	catcatcact	1860
agcctcacag	gcccggacag	gaaccaggtc	gagggggagg	tccaagtgg	ctccaccgca	1920
acacaatctt	tcctggcgac	ctgcgtcaat	ggcgtgtgtt	ggactgtcta	tcattggtgc	1980
ggctcaaaga	cccttgccgg	cccaaagggc	ccaatcacc	aaatgtacac	caatgtggac	2040
caggacctcg	tcggctggca	agcgcctccc	ggggcgcggt	ccttgacacc	atgcacctgc	2100
ggcagctcgg	acctttactt	ggtcacgagg	catgccgatg	tcattccgg	gcgcggcg	2160
ggcgacagca	gggggagcct	actctcccc	aggcccgctc	cctacttgaa	gggctcttcg	2220
ggcggtccac	tgctctgccc	ctcggggcac	gctgtgggca	tccttcgggc	tgccgtgtgc	2280
acccgagggg	ttgcgaaggc	ggtggacttt	gtaccgctcg	agtctatgga	aaccattatg	2340
cggtccccgg	tcctcacgga	caactcgtcc	cctccggccg	taccgcagac	attccagggtg	2400
gcccattctac	acgcccctac	tggttagcggc	aagagcacta	aggtgccggc	tgcgatgca	2460
gcccagggtg	ataaggtgct	tgctcctgaac	ccgtccgtcg	ccgccaccct	aggtttcggg	2520
gcgtatatgt	ctaaggcaca	tggtatcgac	cctaactaca	gaaccgggg	aaggaccatc	2580
accacgggtg	cccccatcac	gtactccacc	ttggcaagt	tccttgccga	cgggtgttgc	2640
tctggggggc	cctatgacat	cataatatgt	gatgagtgc	actcaactga	ctcgaccact	2700
atcctgggca	tcggcacagt	cctggaccaa	gcggagacgg	ctggagcgcg	actcgtcgtg	2760
ctcgccaccg	ctacgcctcc	gggatcgggtc	accgtgccac	atccaaacat	cgaggagggtg	2820
gctctgtcca	gcactggaga	aatccccctt	tatggcaaa	ccatccccat	cgagaccatc	2880
aagggggggg	ggcacctcat	tttctgccc	tcgaagaaga	aatgtgatga	gctcgccg	2940
aagctgtccg	gcctcggact	caatgctgta	gcataattacc	ggggccttga	tgatccgctc	3000
ataccaacta	gcggagacgt	cattgtcgt	gcaacggacg	ctctaattgac	gggctttacc	3060
ggcgatttcg	actcagtgat	cgactgcaat	acatgtgtca	cccagacagt	cgacttcagc	3120
ctggaccoga	ccttcaccat	tgagacgacg	accgtgccac	aagacgcgg	gtcacgctcg	3180
cagcggcgag	gcaggactgg	taggggcagg	atgggcattt	acagggttgt	gactccagga	3240
gaacggccct	cgggcatgtt	cgattcctcg	gttctgtgcg	agtgcctatga	cgcgggctgt	3300
gcttggtacg	agctcacgcc	cgccgagacc	tcagttaggt	tgccgggtta	cctaaacaca	3360
ccagggttgc	ccgtctgcca	ggaccatctg	gagttctggg	agagcgtctt	tacaggcctc	3420
accacatag	acgcccattt	cttgtcccag	actaagcagg	caggagacaa	cttcccctac	3480
ctggtagcat	accaggctac	ggtgtgcgcc	agggctcagg	ctccacctcc	atcgtgggac	3540
caaagtgtga	agtgtctcat	acggctaaag	cctacgtcgc	acggggcaac	gcccctgctg	3600
tataggctgg	gagccgttca	aaacgaggtt	actaccacac	accccataac	caaatacatc	3660
atggcatgca	tgctggctga	cctggaggctc	gtcacgagca	cctgggtgct	ggtaggcgga	3720
gtcctagcag	ctctggccgc	gtattgcctg	acaacaggca	gcgtgggtcat	tgtgggcagg	3780
atcatcttgt	ccggaaagcc	ggccatcatt	cccgacagg	aagtccttta	ccgggagttc	3840
gatgagattg	aagagtgcgc	ctcacacctc	ccttacatcg	aacagggaat	gcagctcgcc	3900
gaacaattca	aacagaaggc	aatcgggttg	ctgcaaacag	ccaccaagca	agcggaggct	3960
gctgctcccg	tgggtggaatc	caagtggcgg	accctcgaag	cctcttgggc	gaagctatg	4020
tgggaatttca	tcagcgggat	acaatattta	gcaggcttgt	ccactctgcc	tggcaacccc	4080
gcgatagcat	cactgatggc	attcacagcc	tctatcacca	gcccgtcac	caccaacat	4140
accctcctgt	ttaacatcct	ggggggatgg	gtggccgccc	aacttgctcc	tcccagcgct	4200

gcttctgctt	tcgtaggcgc	cggcatcgct	ggagcggctg	ttggcagcat	aggccttggg	4260
aaggtgcttg	tggataatttt	ggcagggttat	ggagcagggg	tggcaggcgc	gctcgtggcc	4320
tttaaggtca	tgagcggcgga	gatgccttcc	accgaggacc	tgggttaacct	actccctgct	4380
atcctctccc	ctggcgccct	agtcgtcggg	gtcgtgtgcg	cagcgatact	gcgtcggcac	4440
gtgggccccag	gggaagggggc	tgtgcagtgg	atgaaccqcc	tqatagcgtt	cgttcgcgg	4500
ggtaaccacg	tctccccac	gcactatgtg	cctgagagcg	acgctgcagc	acgtgtcact	4560
cagatcctct	ctagtcttac	catcactcag	ctgctgaaga	ggcttcacca	gtggatcaac	4620
gaggactgct	ccacgccatg	ctccggctcg	tggctaagag	atgtttggga	ttggatatgc	4680
acggtgttga	ctgatttcaa	gacctggctc	cagtccaagc	tcttgccgcg	attgccggga	4740
gtccccctct	tctcatgtca	acgtgggtac	aagggagtct	ggcggggcga	cggcatcatg	4800
caaaccacat	gccccatgtg	agcacagatc	accggacatg	tgaaaaacgg	ttccatgagg	4860
atcgtggggc	ctaggacctg	tagtaacacg	tggcatggaa	cattccccat	taacgcgtac	4920
accacggggc	cctgcacgcc	ctccccggcg	ccaaattatt	ctaggggcgt	gtggcgggtg	4980
gctgctgagg	agtacgtgga	ggttacgcgg	gtgggggatt	tccactacgt	gacgggcatg	5040
accactgaca	acgtaaagtg	cccgtgtcag	gttccggccc	ccgaattctt	cacagaagtg	5100
gatgggggtg	ggttgcacag	gtacgtccca	gcgtgcaaac	ccctcctacg	ggaggaggtc	5160
acattcctgg	tggggtctaa	tcaatacctg	ggtgggtcac	agctcccatg	cgagcccga	5220
ccggacgtag	cagtgtcac	ttccatgtct	accgacccct	cccacattac	ggcggagacg	5280
gctaagcgtg	ggctggccag	gggatctccc	ccctccttgg	ccagctcatc	agctatccag	5340
ctgtctgcgc	cttccctgaa	ggcaacatgc	actaccctgc	atgactcccc	ggacgctgac	5400
ctcatcgagg	ccaacctcct	gtggcggcag	gagatggggc	ggaacatcac	ccgctgggag	5460
tcagaaaata	aggtagtaat	tttggagtct	ttcgagccgc	tccaagcggg	ggaggatgag	5520
agggaagtat	ccgttcgggc	ggagatcctg	cggaggtcca	ggaaattccc	tcgagcgatg	5580
cccatatggg	cactcccgga	ttacaacctt	ccactgttag	agtcctggaa	ggaccgggac	5640
tacgtccctc	cagtgggtaca	cgggtgtcca	ttgccgcctg	ccaaggcccc	tccggtacca	5700
cctccacgga	ggaagaggac	ggttgtcctg	tcagaatcta	ccgtgtcttc	tgcttggcg	5760
gagctcgcca	caaagacctt	cggcagctcc	gaatcgctcg	ccgtcgacag	cggcacggca	5820
acggcctctc	ctggtgagga	cgtcgtctgc	tgctcgatgt	cctacacatg	gacaggcgcc	5880
ctgatccacg	catgcgctgc	ggaggaaacc	aagctgccca	tcaatgcact	gagcaactct	5940
ttgtccgac	accacaactt	ggtctatgct	acaacatctc	gcagcgcaag	cctgcggcag	6000
aagaaggtca	cctttgacag	actgcaggtc	ctggacgacc	actaccggga	cgtgctcaag	6060
gagatgaagg	cgaaggcgtc	cacagttaag	gctaaacttc	tatccgtgga	ggaagcctgt	6120
aagctgacgc	ccccacattc	ggccagatct	aaattttggc	atggggcaaa	ggacgtccgg	6180
aacctatcca	gcaaggccgt	taaccacatc	cgtccgtgtg	ggaaggactt	gctggaagac	6240
actgagacac	caattgacac	caccatcatg	gcataaaatg	agggtttctg	cgtccaacca	6300
gagaaggggg	gccgcaagcc	agctcgctt	atcgtattcc	cagatttggg	ggttcgtgtg	6360
tgcgagaaaa	tggcccttta	cgatgtggtc	tccaccttcc	ctcaggccgt	gatgggctct	6420
tcatacggat	tccaatactc	tccctggacag	cgggtcgagt	tccctggtgaa	tgcttggaaa	6480
gcgaagaaat	gccctatggg	cttcgcata	gacacccgt	gttttgactc	aacggctact	6540
gagaatgaca	tccgtgttga	ggagtcaatc	taccaatgtt	gtgacttggc	ccccgaagcc	6600
agacaggcca	taaggtcgct	cacagagcgg	ctttacatcg	ggggccccct	gactaattct	6660
aaagggcaga	actgcggcta	tcgcgggtgc	cgcgcgagcg	gtgtactgac	gaccagctgc	6720
ggtaataccc	tcacatgtta	cttgaaggcc	gctgcggcct	gtcgagctgc	gaagctccag	6780
gactgcacga	tgctcgtatg	cggagacgac	cttgtcgtaa	tctgtgaaa	cgcggggacc	6840
caagaggacg	aggcgagcct	acgggccttc	acggaggcta	tgactagata	ctctgcccc	6900
cctggggacc	cgcccaaac	agaatacgac	ttggagttag	taacatcatg	ctcttccaat	6960
gtgtcagtcg	cgcacgatgc	atctggcaaa	agggtgtact	atctcaccgc	tgacccccacc	7020
accccccttg	cgcgggctgc	gtgggagaca	gctagacaca	ctccagtcaa	ttcctggcta	7080
ggcaacatca	tcatgtatgc	gccaccttg	tgggcaagga	tgatcctgat	gactcatttc	7140
ttctccatcc	ttctagtcta	ggaacaactt	gaaaaagccc	tagattgtca	gatctacggg	7200
gcttggtact	ccattgagcc	acttgacctt	cctcagatca	ttcaacgact	ccatggcctt	7260
agcgcatttt	cactccatag	ttactctcca	ggtgagatca	ataggggtggc	ttcatgcctc	7320
aggaaacttg	gggtaccgcc	cttgcgagtc	tggagacatc	gggccagaag	tgtccgcgct	7380
aggctactgt	cccagggggg	gagggctgcc	acttgtggca	agtacctctt	caactgggca	7440
gtaaggacca	agctcaaac	cactccaatc	ccggctgcgt	cccagttgga	tttatccagc	7500
tggttcgttg	ctggttacag	cgggggagac	atatatcaca	gcctgtctcg	tgccccgacc	7560
cgctgggtca	tgtgtgacct	actcctactt	ctctgtaggg	taggcatacta	tctactcccc	7620
aaccgatgaa	cggggaccta	aacactccag	gccaataggc	catcctgttt	ttttcccttt	7680
ttttttttct	tttttttttt	tttttttttt	tttttttttt	ttttctcttt	ttttttcctc	7740
tttttttcc	tttttttcc	ttgggtggctc	catcttagcc	ctagtcacgg	ctagctgtga	7800
aaggtccgtg	agccgcttga	ctgcagagag	tgctgatact	ggcctctctg	cagatcaagt	7860
actcctgcag	gcgcgccact	agtgggaata	cgcgggggat	gccgcgtttt	agcatattga	7920
cgaccaaat	ctcatgtttg	acagcttatc	atcgataagc	tttaatgcgg	tagtttatca	7980
cagttaaatt	gctaacgcag	tcaggcaccc	tgtatgaaat	ctaacaatgc	gctcatcgtc	8040
atcctcggca	ccgtcaccct	ggatgctgta	ggcataggct	tggttatgcc	ggtactgccg	8100
ggcctcttgc	gggatatcgt	ccattccgac	agcatcgcca	gtcactatgg	cgtgctgcta	8160

gcgctatatg	cgttgatgca	atttctatgc	gcacccgttc	tccgagcact	gtccgaccgc	8220
tttggccgcc	gcccagtcct	gctcgcctcg	ctacttggag	ccactatcga	ctacgcgatc	8280
atggcgacca	cacccgtcct	gtggatcctc	tacgccggac	gcacgcgtgg	cggcatcacc	8340
ggcgccacag	gtgcggttgc	tggcgccat	atcgccgaca	tcaccgatgg	ggaagatcgg	8400
gctcgccact	tggggctcat	gagcgcttgt	ttcggcgctg	gtatggtggc	agcccccgtg	8460
gccgggggac	tgttggggcg	catctccttg	catgcaccat	tccttgccgc	ggcggtgctc	8520
aacggcctca	acctactact	gggctgcttc	ctaattgcagg	agtcgcataa	gggagagcgt	8580
cgaccgatgc	ccttgagagc	cttcaaccca	gtcagctcct	tccggtgggc	gcggggcatg	8640
actatcgctg	ccgcacttat	gactgtcttc	tttatcatgc	aactcgtagg	acagggtgccg	8700
gcagcgctct	gggtcatttt	cggcgaggac	cgttttcgct	ggagcgcgac	gatgatcggc	8760
ctgtcgcttg	cgggtattcg	aatcttgcac	gccctcgctc	aagccttcgt	cactggtccc	8820
gccaccaaac	gtttcgcgca	gaagcaggcc	attatcgccg	gcattggcggc	cgacgcgctg	8880
ggctacgtct	tgctggcggt	cgcgacgcga	ggctggatgg	ccttccccat	tatgattctt	8940
ctcgcttccg	gcggcatcgg	gatgcccgcg	ttgcaggcca	tgctgtccag	gcaggtagat	9000
gacgaccatc	agggacagct	tcaaggatcg	ctcgcggtc	ttaccagcct	aacttcgatc	9060
actggaccgc	tgatcgctac	ggcgatttat	gccgcctcgg	cgagcacatg	gaacgggttg	9120
gcatggattg	taggcggcgc	cctatacctt	gtctgcctcc	cgcggttgcg	tccggtgcca	9180
tggagccggg	ccacctcgac	ctgaatggaa	gccggcggca	cctcgctaac	ggattcacca	9240
ctccaagaat	tggagccaat	caattcttgc	ggagaactgt	gaatgcgcaa	accaaccctt	9300
ggcagaacat	atccatcgcg	tccgccatct	ccagcagccg	cacgcggcgc	atctcgggca	9360
gcgttgggtc	ctggccacgg	gtgcgcgatg	tcggtctcct	gtcggtgagg	acccgggctag	9420
gctggcgggg	ttgccttact	ggttagcaga	atgaatcacc	gatacgcgag	cgaacgtgaa	9480
gcgactgctg	ctgcacaaacg	tctgcgacct	gagcaacaac	atgaatggtc	ttcgggttcc	9540
gtgtttcgta	aagtctggaa	acgcggaagt	cagcgccctg	caccattatg	ttccggatct	9600
gcacgcgagg	atgctgctgg	ctaccctgtg	gaacacctac	atctgtatta	acgaagcgct	9660
ggcattgacc	ctgagtgatt	tttctctggt	cccgcgcgat	ccataccgcc	agttgtttac	9720
cctcacaacg	ttccagtaac	cgggcatggt	catcatcagt	aaccggtatc	gtgagcatcc	9780
tctctcgttt	catcggtatc	attaccccca	tgaacagaaa	ttccccctta	cacggaggca	9840
tcaagtgacc	aaacaggaaa	aaaccgccct	taacatggcc	cgttttatca	gaagccagac	9900
attaacgctt	ctggagaaaac	tcaacgagct	ggacgcggat	gaacaggcag	acatctgtga	9960
atcgcttcac	gaccacgctg	atgagcttta	ccgcagctgc	ctcgcgcggt	tccgtgatga	10020
cggtgaaaac	ctctgacaca	tgcagctccc	ggagacggtc	acagcttgct	tgtaaagcga	10080
tgcggggagc	agacaagccc	gtcagggcgc	gtcagcgggt	gttggcgggt	gtcggggcgc	10140
agccatgacc	cagtcacgta	gcgatagcgg	agtgtatact	ggcttaacta	tgcggcatca	10200
gagcagattg	tactgagagt	gcaccatatt	cgggtgtgaa	taccgcacag	atgcgttaagg	10260
agaaaatacc	gcacagggcg	ctcttcgcgt	tcctcgctca	ctgaactcgt	gcgctcggtc	10320
gttcggctgc	ggcgagcggt	atcagctcac	tcaaaggcgg	taatacgggt	atccacagaa	10380
tcaggggata	acgcaggaaa	gaacatgtga	gcaaaaggcc	agcaaaaggc	caggaaaccgt	10440
aaaaaggccg	cgttgctggc	gtttttccat	aggctccgcc	cccctgacga	gcacacaaaa	10500
aatcgacgct	caagtcagag	gtggcgaaac	ccgacaggac	tataaagata	ccaggcgttt	10560
ccccctggaa	gtccctcgt	gcgctctcct	gttccgaccc	tgcgcgttac	cggatacctg	10620
tccgcctttc	tcccttcggg	aagcgtggcg	ctttctcata	gctcacgctg	taggtatctc	10680
agttcggtgt	aggctcggtc	ctccaagctg	ggctgtgtgc	acgaaccccc	cgttcagccc	10740
gaccgctgcg	ccttatccgg	taactatcgt	cctgagttca	acccggtaag	acacgactta	10800
tcgccacttg	cagcagccac	tggtaacagg	attagcagag	cgaggatgtg	aggcgggtgt	10860
acagagttct	tgaagtgtg	gcctaactac	ggctacacta	gaaggacagt	atttggtatc	10920
tgcgctctgc	tgaagccagt	taccttcgga	aaaagagttg	gtagctcttg	atccggcaaa	10980
caaaccaccg	ctggtagcgg	tggttttttt	gtttgcaagc	agcagattac	gcgcagaaaa	11040
aaaggatctc	aagaagatcc	tttgatcttt	tctacggggt	ctgacgctca	gtggaacgaa	11100
aactcacgtt	aagggatttt	ggtcatgaga	ttatcaaaaa	ggatcttcac	ctagatcctt	11160
ttctagataa	tacgactcac	tata				11184

<210> 12
 <211> 11313
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Plasmid

<400> 12						
gccagccccc	gattggggggc	gacactccac	catagatcac	tccctgtga	ggaactactg	60
tcttcacgca	gaaagcgtct	agccatggcg	ttagtatgag	tgtcgtgcag	cctccaggac	120
ccccctccc	gggagagcca	tagtgggtctg	cggaaaccggt	gagtacaccg	gaattgccag	180

gacgaccggg	tcctttcttg	gatcaaccgc	ctcaatgcct	ggagatttgg	gcgtgcccc	240
gcgagactgc	tagccgagta	gtgttggtgc	gcgaaaggcc	ttgtggtact	gcctgatagg	300
gtgcttgcca	gtgccccggg	aggtctcgta	gaccgtgcac	catgagcacg	aatcctaaac	360
ctcaaagaaa	aaccaaaggg	cgcgccatga	ttgaacaaga	tggattgcac	gcaggttctc	420
cggccgcttg	ggtggagagg	ctattcggct	atgactgggc	acaacagaca	atcggctgct	480
ctgatgccgc	cgtgttcggg	ctgtcagcgc	aggggcgccc	ggttcttttt	gtcaagaccg	540
acctgtccgg	tgcctgaat	gaactgcagg	acgaggcagc	gcggctatcg	tggctggcca	600
cgacggggcg	tccttgccga	gctgtgctcg	acgttgtcac	tgaagcggga	agggactggc	660
tgctattggg	cgaagtgcgc	gggcaggatc	tcctgtcatc	tcaccttgct	cctgccgaga	720
aagtatccat	catggctgat	gcaatgcggc	ggctgcatac	gcttgatccg	gctacctgcc	780
cattcgacca	ccaagcgaaa	catcgcatcg	agcgagcacg	tactcggatg	gaagccggtc	840
ttgtcgatca	ggatgatctg	gacgaagagc	atcaggggct	cgcgccagcc	gaactgttcg	900
ccaggctcaa	ggcgcgcag	cccgacggcg	aggatctcgt	cgtgacccat	ggcgatgcct	960
gcttgccgaa	tatcatgggtg	gaaaatggcc	gcttttcttg	attcatcgac	tgtggccggc	1020
tgggtgtggc	ggaccgctat	caggacatag	cgttggctac	ccgtgatatt	gctgaagagc	1080
ttggcggcga	atgggctgac	cgttctctcg	tgctttacgg	tatcgccgct	cccgatctgc	1140
agcgcacgcg	cttctatcgc	cttcttgacg	agttcttctg	agtttaaaac	gaccacaacg	1200
gtttccctct	agcgggatca	attccgcccc	tctccctccc	ccccccctaa	cgttactggc	1260
cgaagccgct	tgggaataagg	ccggtgtgcg	tttgtctata	tgttattttc	caccatattg	1320
ccgtcttttg	gcaatgtgag	ggcccggaaa	cctggccctg	tcttcttgac	gagcattcct	1380
aggggtcttt	ccctctctcg	caaaggaatg	caaggctcgt	tgaatgtcgt	gaaggaagca	1440
gttctctctg	aagcttcttg	aagacaaaca	acgtctgtag	cgaccttttg	caggcagcgg	1500
aacccccac	ctgcgcagac	gtgcctctgc	ggccaaaagc	cacgtgtata	agatacacct	1560
gcaaaggcgg	cacaacccca	gtgccacggt	gtgagttgga	tagttgtgga	aagagtcaaa	1620
tggctctcct	caagcgtatt	caacaagggtg	ctgaaggatg	cccagaagg	acccatttgt	1680
atgggatctg	atctggggcc	tcggtgcaca	tgctttacat	gtgttttagt	gaggttaaaa	1740
aacgtctagg	ccccccgaac	cacggggacg	tggttttcct	ttgaaaaaca	cgataatacc	1800
atggcgccta	ttacggccta	ctcccaacag	acgcgagggc	tacttggctg	catcatcact	1860
agcctcacag	gcggggacag	gaaccaggtc	gagggggagg	tccaagtggg	ctccaccgca	1920
acacaatctt	tcctggcgac	ctgcgtcaat	ggcgtgtgtt	ggactgtcta	tcattggtgcc	1980
ggctcaaaga	cccttgccgg	cccaaagggc	ccaatcacc	aaatgtacac	caatgtggac	2040
caggacctcg	tcggctggca	agcgccccc	ggggcgcggt	ccttgacacc	atgcacctgc	2100
ggcagctcgg	acctttactt	ggtcacgagg	catgccgatg	tcattccggt	gcgcggcgcg	2160
ggcgacagca	gggggagcct	actctcccc	aggcccgctc	cctacttgaa	gggctcttcg	2220
ggcggtccac	ctgctcgccc	ctcggggcac	gctgtggcca	tctttcgggc	tgccgtgtgc	2280
acccgagggg	ttgcgaaggc	ggtggacttt	gtaccgctcg	agtctatgga	aaccactatg	2340
cggctccccg	tcttcacgga	caactcgtcc	cctccggccg	taccgcagac	attccagggtg	2400
gcccattctac	acgcccctac	tggtagcggc	aagagcacta	aggtgccggc	tgcgtatgca	2460
gcccagggtg	ataagggtgt	tgtcctgaac	ccgtccgtcg	ccgccaccct	aggttttcggg	2520
gcgtatctgt	ctaaggcaca	tggatccagc	cctaaccatc	gaaccggggg	agagccatc	2580
accacgggtg	cccccatcac	gtactccacc	tatggcaagt	ttcttgccga	cgggtggttc	2640
tctggggggc	cctatgacat	cataatatgt	gatgagtgcc	actcaactga	ctcgaccact	2700
atcctgggca	tcggcacagt	cctggaccaa	gcggagacgg	ctggagcgcg	actcgtcgtg	2760
ctcgccaccg	ctacgcctcc	gggatcggtc	accgtgccac	atccaaacat	cgaggagggtg	2820
gctctgtcca	gcactggaga	aatccccctt	tatggcaaa	ccatccccat	cgaaccatc	2880
aaggggggga	ggcacctcat	tttctgccat	tcgaagaaga	aatgtgatga	gcgcgcccg	2940
aagctgtccg	gcctcggact	caatgctgta	gcatattacc	ggggccttga	tgtatccgtc	3000
ataccaacta	gcggagacgt	cattgtcgta	gcaacggacg	ctctaattgac	gggctttacc	3060
ggcgatttcg	actcagtgat	cgactgcaat	acatgtgtca	cccagacagt	cgacttcagc	3120
ctggaccgga	ccttcaccat	tgagacgacg	accgtgccac	aagacgcggg	gtcacgctcg	3180
cagcggcgag	gcaggactgg	taggggcagg	atgggcattt	acaggtttgt	gactccagga	3240
gaacggccct	cgggcatggt	cgattcctcg	gttctgtgcg	agtgtatga	cgcgggctgt	3300
gcttggtacg	agctcacgcc	cgcgcagacc	tcagttaggt	tgcgggctta	cctaaacaca	3360
ccagggttgc	cgtctgcca	ggaccatctg	gagttctggg	agagcgtctt	tacaggcctc	3420
accacatag	acgcccattt	cttgtcccag	actaagcagg	caggagacaa	cttcccctac	3480
ctggtagcat	accaggctac	ggtgtgcggc	agggtctcagg	ctccacctcc	atcgtgggac	3540
caaagtgtga	agtgtctcat	acggctaaag	cctacgtcgc	acggggccaac	cccctgtctg	3600
tataggctgg	gagccgttca	aaacgaggtt	actaccacac	accccataac	gaaatacatc	3660
atggcatgca	tgtcagctga	cctggagggtc	gtcacgagca	cctgggtgct	ggtaggcgga	3720
gtcctagcag	ctctggccgc	gtattgcctg	acaacaggca	gcgtgggtcat	tgtgggcagg	3780
atcatcttgt	ccggaaaagcc	ggccatcatt	cccagacagg	aagtctttta	ccgggagttc	3840
gatgagatgg	aagagtgcgc	ctcacacctc	ccttacatcg	aacggggaat	gcagctcgcc	3900
gaacatttca	aacgaaggc	aatcgggttg	ctgcaaacac	ccaccaagca	agcggaggct	3960
gctgctcccg	cgggtggaatc	caagtggcgg	accctcgaag	ccttctgggc	gaagcatatg	4020
tgggaatttca	tcagcgggat	acaatattta	gcaggcttgt	ccactctgcc	tggcaacccc	4080
gcgatagcat	cactgatggc	attcacagcc	tctatcacca	gcccgtctac	cacccaacat	4140

accctcctgt	ttaacatcct	ggggggatgg	gtggccgccc	aacttgctcc	ccccagecgt	4200
gcttctgctt	tcgtaggcgc	cgccatcgct	ggagcggctg	ttggcagcat	aggccttggg	4260
aaggtgcttg	tggatatttt	ggcagggtat	ggagcagggg	tggcaggcgc	gctcgtggcc	4320
tttaagggtca	tgagcggcga	gatgccctcc	accgaggacc	tggttaacct	actccctgct	4380
atcctctccc	ctggcgccct	agtcgtcggg	gtcgtgtgcg	cagcgatact	gcgtcggcag	4440
gtgggcccag	gggagggggc	tgtgcagtgg	atgaaccggc	tgatagcggt	cgcttcgcgg	4500
ggtaaccacg	tctccccac	gcactatgtg	cctgagagcg	acgctgcagc	acgtgtcact	4560
cagatcctct	ctagtcttac	catcactcag	ctgctgaaga	ggcttcacca	gtggatcaac	4620
gaggactgct	ccacgccatg	ctccggctcg	tggctaagag	atgtttggga	ttggatatgc	4680
acggtgttga	ctgatttcaa	gacctggctc	cagtccaagc	tcctgccgcg	attgccggga	4740
gtccccctct	tctcatgtca	acgtgggtac	aagggtgtct	ggcggggcga	cggcatcatg	4800
caaaccacct	gcccattgtg	agcacagatc	actcggacatg	tgaaaaacgg	ttccatgagg	4860
atcgtggggc	ctaggacctg	tagtaaacag	tggcatggaa	cattccccat	taacgcgtac	4920
accacggggc	cctgcacgcc	ctccccggcg	ccaaattatt	ctagggcgct	gtggcgggtg	4980
gctgctgagg	agtacgtgga	ggttacgcgg	gtgggggatt	tcactacgt	gacgggcatg	5040
accactgaca	acgtaaagtg	cccgtgtcag	gttccggccc	ccgaattctt	cacagaagtg	5100
gatgggttgc	gtttgcacag	gtacgtccca	gctgacaaac	ccctccatcg	ggaggagggtc	5160
acattcctgg	tccgggtcaa	tcaatacctg	gttgggtcac	agctcccatg	cgagcccga	5220
ccggacgtag	cagtgtctac	ttccatgctc	accgaccctt	cccacattac	ggcggagacg	5280
gctaagcgta	ggctggccag	gggatctccc	ccctccttgg	ccagctcatc	agctagccag	5340
ctgtctgcgc	cttcccttga	ggcaacatgc	actaccctgc	atgactcccc	ggacgctgac	5400
ctcactgagg	ccaacctcct	gtggcggcag	gagatggggc	ggaacatcac	ccgcgtggag	5460
tcagaaaaata	aggtagtaata	tttggactct	ttcgagccgc	tccaagcgga	ggaggatgag	5520
agggaagtat	ccgttccggc	ggagatcctg	cggaggtcca	ggaaattccc	tcgagcgatg	5580
cccatatggg	cacgcccggg	ttacaaccct	ccactgttag	agtcctggaa	ggacccggac	5640
tacgtccctc	cagtgggtaca	cgggtgtcca	ttgccgcctg	ccaaggcccc	tccgatacca	5700
cctccacgga	ggaagaggac	ggttgtcctg	tcagaatcta	ccgtgtcttc	tgccttggcg	5760
gagctcgcca	caaagacctt	cggcagctcc	gaatcgctgg	ccgtcgacag	cggcacggca	5820
acggcctctc	ctgaccagcc	ctccgacgac	ggcgacgcgg	gatccgacgt	tgagtcgtac	5880
tcctccatgc	cccccttga	gggggagccg	ggggatcccg	atctcagcga	cgggtcttgg	5940
tctaccgtaa	gcgaggaggc	tagtgaggac	gtcgtctgct	gctcgatgtc	ctacacatgg	6000
acaggcgccc	tgatcacgcc	atgcgctgcg	gaggaaacca	agctgcccat	caatgcactg	6060
agcaactctt	tgtccgttca	ccacaacttg	gtctatgcta	caacatctcg	cagcgcgaagc	6120
ctgcggcaga	agaaggtcac	ctttgacaga	ctgcaggtcc	tggacgacca	ctaccgggac	6180
gtgtcaagg	agatgaaggc	gaaggcgctc	acagttaagg	ctaaaacttct	atccgtggag	6240
gaagcctgta	agctgacgcc	cccacattcg	gccagatcta	aatttggcta	tggggcaaaag	6300
gacgtccgga	acctatccag	caaggccgtt	aaccacatcc	gctccgtgtg	gaaggacttg	6360
ctggaagaca	ctgagacacc	aattgacacc	accatcatgg	caaaaaatga	ggttttctgc	6420
gtccaaccag	agaagggggg	ccgcaagcca	gctcgcccta	tcgtattccc	agatttgggg	6480
ttctcgttgt	gcgagaaaat	ggccctttac	gatgtggtct	ccaccctccc	tcaggccgtg	6540
atgggtctct	catacggatt	ccaatactct	cctggacagc	gggtcgagtt	cctgggtgat	6600
gcctggaaag	cgaagaaatg	ccctatgggc	ttcgcatatg	acaccgctg	ttttgactca	6660
acggtcactg	agaatgacat	ccgtgttgag	gagtcaatct	accaatgttg	tgacttggcc	6720
cccgaagcca	gacaggccat	aaggctcgctc	acagagcggc	ttacatcgg	gggccccctg	6780
actaattcta	aagggcagaa	ctgcggctat	cgccgggtgc	gcgcgagcgg	tgtactgacg	6840
accagctgcg	cacatgttac	ccatgtttac	ttgaaggccg	ctgcggcctg	tcgagctgcg	6900
aagctccagg	actgcacgat	gctcgtatgc	ggagacgacc	ttgtcgttat	ctgtgaaagc	6960
gcggggaccc	aagaggacga	ggcgagccta	cgggccttca	cggaggctat	gactagatac	7020
tctgcccccc	ctggggaccc	gccccaaacca	gaatacgact	tggagttgat	aacatcatgc	7080
tcctccaatg	tgtcagtcgc	gcacgatgca	tctggcaaaa	gggtgtacta	tctcaccctg	7140
gaccccacca	cccccttgc	gcgggtgcgc	tgggagacag	ctagacacac	tccagtcaat	7200
tcctggctag	gcaacatcat	catgtatgcg	cccaccttgt	gggcaaggat	gatcctgatg	7260
actcatttct	tctccatcct	tctagctcag	gaacaacttg	aaaaagccct	agattgtcag	7320
atctacgggg	cctgttactc	cattgagcca	cttgacctac	ctcagatcat	tcaacgactc	7380
catggcctta	gcgcattttc	actccatagt	tactctccag	gtgagatcaa	taggggtggct	7440
tcatgcctca	ggaaacttgg	ggtaccgccc	ttgcgagttc	ggagacatcg	ggccagaagt	7500
gtccgcgcta	ggctactgtc	ccaggggggg	agggtcgcca	cttgtggcaa	gtacctcttc	7560
aactgggcag	taaggaccaa	gctcaaatcc	actccaatcc	cggctgcgtc	ccagttggat	7620
ttatccagct	ggttcggttc	tggttacagc	gggggagaca	tatatcacag	cctgtctcgt	7680
gcccgaaccc	gctggttcat	gtggtgccta	ctcctacttt	ctgtaggggt	aggcatctat	7740
ctactcccca	accgatgaac	ggggaccta	acactccagg	ccaataggcc	atcctgtttt	7800
tttccctctt	ttttttctct	ttttttctct	ttttttctct	ttttttctct	tttctctctt	7860
tttttccctt	ttttttctct	ttttttctct	ttttttctct	ttttttctct	ttttttctct	7920
tagctgtgaa	aggtccgtga	gcccgttgac	tgcagagagt	gctgatactg	gcctctctgc	7980
agatcaagta	ctcctgcagg	cgcgccacta	gtgggaatac	gcgggggtatg	ccgcgtttta	8040
gcatattgac	gacccaattc	tcatgtttga	cagcttatca	tcgataagct	ttaatgcggt	8100

agttttatcac	agttaaattg	ctaacgcag	caggcaccgt	gtatgaaatc	taacaatg	8160
ctcatcgta	tcctcggc	cgtcaccctg	gatgctgtag	gcataggctt	ggttatg	8220
gtactgccg	gcctcttg	ggatatcg	cattccgaca	gcatcgccag	tcactatg	8280
gtgctgctag	cgctatatg	ggtgatgcaa	tttctatg	caccggttct	cggagcactg	8340
tccgaccgct	ttggccg	cccagtcctg	ctcgcttcgc	tacttggagc	cactatcg	8400
tacgcgatca	tggcgaccac	accggtcctg	tggatcctct	acgcgggacg	catcggtggc	8460
ggcatcaccg	gcgccacagg	tgcggttgct	ggcgccata	tcgccgacat	caccgatggg	8520
gaagatcggg	ctcgccactt	cgggctcatg	agcgcttggt	tcggcggtgg	tatgggtggc	8580
ggccccgtgg	ccgggggact	gttggggcgc	atctccttgc	atgcaccatt	ccttgcgggc	8640
gcggtgctca	acggcctcaa	cctactactg	ggctgcttcc	taatgcagga	gtcgcataag	8700
ggagagcgtc	gaccgatgcc	cttgagagcc	ttcaaccag	tcagctcctt	ccggtggg	8760
cggggcatga	ctatcgtcgc	cgcacttatg	actgtcttct	ttatcatgca	actcgtagga	8820
caggtgccgg	cagcgctctg	ggtcattttc	ggcgaggacc	gctttcgtctg	gagcgcgacg	8880
atgatcggcc	tgtcgcttgc	ggtattcgga	atcttgacag	ccctcgctca	agccttcgtc	8940
actggtcccg	ccaccaaacg	tttcggcgag	aagcaggcca	ttatcgccgg	catggcgggc	9000
gacgcgctgg	gctacgtctt	gctggcgctt	gcgacgcgag	gctggatggc	cttccccatt	9060
atgattcttc	tcgcttcgg	cggcatcggg	atgcccgct	tgcaggccat	gctgtccagg	9120
caggtagatg	acgaccatca	gggacagcct	caaggatcgc	tcgcggtctt	taccagccta	9180
acttcgatca	ctggaccgct	gatcgtaacg	gcgatttatg	ccgcctcggc	gagcacatgg	9240
aacgggttgg	catggattgt	aggcgccggc	ctataccttg	tctgcctccc	cgcgttgctg	9300
cgcggtgcat	ggagccgggg	cacctcgacc	tgaatggaag	ccggcgggc	ctcgctaacc	9360
gaattcaccac	tccaagaatt	ggagccaatc	aattcttgcg	gagaactgtg	aatgcgcaaa	9420
ccaacccttg	gcagaacata	tccatcgctg	ccgccatctc	cagcagccgc	acgcgtagca	9480
tctcgggcag	cgttggttcc	tggccaacgg	tgcgcatgat	cgtgctcctg	tcgttgagga	9540
cccggctagg	ctggcggggt	tgccttactg	gtagcagaa	tgaatcaccg	atacgcgagc	9600
gaacgtgaag	cgactgctgc	tgcataaacg	ctgcgacctg	agcaacaaca	tgaatggtct	9660
tcggtttccg	tgtttcgtaa	agtctggaaa	cgcggaagtc	agcgccctgc	accattatgt	9720
tccggatctg	catcgagga	tgtgctggc	tacccttggt	aacacctaca	tctgtattaa	9780
cgaagcgctg	gcattgaccc	tgagtgaatt	ttctctggtc	ccgcgcgcatc	cataccggcca	9840
gttggtttacc	ctcacaacgt	tccagtaacc	gggcatgttc	atcatcagta	acccgtatcg	9900
tgagcatcct	ctctcgtttc	atcggtatca	ttacccccat	gaacagaaat	tcccccttac	9960
acggaggcat	caagtgaacca	aacaggaaaa	aaccgcctt	aacatggccc	gctttatcag	10020
aagccagaca	ttaacgcttc	tggagaaact	caacgagctg	gacgcggatg	aacaggcaga	10080
catctgtgaa	tcgcttcacg	accacgctga	tgagctttac	cgcagctgoc	tcgcgcgctt	10140
cgggtgatgac	gggtgaaaacc	tctgacacac	gcagctcccg	gagacgggtca	cagcttgtct	10200
gtaagcggat	gccgggagca	gacaagcccc	tcaggggcgc	tcagcgggtg	ttggcggggtg	10260
tcggggcgca	gccatgaccc	agtcacgtag	cgatagcggg	gtgtatactg	gcttaactat	10320
gcggcatcag	agcagattgt	actgagagt	caccatattg	ggtgtgaaat	accgcacaga	10380
tgcgtaagga	gaaaataaccg	catcaggcgc	tcttcgctt	cctcgctcac	tgactcgctg	10440
cgtcggctcg	ttcggtg	gcgagcggt	tcagctcact	caaaggcggt	aatacggtta	10500
tccacagaat	caggggataa	cgcaggaaag	aacatgtgag	caaaaggcca	gcaaaaggcc	10560
aggaaccgta	aaaaggccgc	ggtgctggcg	tttttccata	ggctccgccc	ccctgacgag	10620
catcacaaaa	atcgacgctc	aagtcaagg	tggcgaaacc	cgacaggact	ataaagatac	10680
caggcggttc	cccctggaag	ctccctcg	cgctctcctg	ttccgacctt	gccgcttacc	10740
ggatacctgt	cgccttttct	cccttcggga	agcggtggcg	tttctcatag	ctcacgctgt	10800
aggtatctca	gttcgggtgta	ggctggtcgc	tccaagctgg	gctgtgtgca	cgaaccccc	10860
gttcagcccg	accgctgcgc	cttatccggt	aactatcg	ttgagtccaa	cccggtaaga	10920
cacgacttat	cgccactggc	agcagccact	ggtaacagga	ttagcagagc	gaggatgta	10980
ggcggtgcta	cagagttctt	gaagtgggtg	cctaactacg	gctacactag	aaggacagta	11040
tttggtatct	gcgctctgct	gaagccagtt	accttcggaa	aaagagttgg	tagctcttga	11100
tccggcaaac	aaaccaccgc	tggtagcggt	ggtttttttg	tttgcaagca	gcagattacg	11160
cgcagaaaaa	aaggatctca	agaagatcct	ttgatctttt	ctacgggggtc	tgacgctcag	11220
tggaaacgaaa	actcacgtta	agggattttg	gtcatgagat	tatcaaaaag	gatcttcacc	11280
tagatccttt	tctagataat	acgactcact	ata			11313

<210> 13

<211> 11184

<212> DNA

<213> Artificial Sequence

<220>

<223> Plasmid

<400> 13

gccagccccc	gattgggggg	gacactccac	catagatcac	tcccctgtga	ggaactactg	60
tcttcacgca	gaaagcgtct	agccatggcg	ttagtatgag	tgctcgtgcag	cctccaggac	120
ccccctccc	gggagagcca	tagtgggtctg	cggaaccggg	gagtacaccg	gaattgccag	180
gacgaccggg	tccctttcttg	gatcaaccgg	ctcaatgcct	ggagatttgg	gcggtgcccc	240
gcgagactgc	tagccqagta	qtgttgggtc	gcgaaaggcc	ttgtgggtact	gcttgatagg	300
gtgcttgcca	gtgccccggg	aggtctcgta	gaccgtgcac	catgagcacg	aatcctaaac	360
ctcaaagaaa	aaccaaaggg	cgcgccatga	ttgaacaaga	tggattgcac	gcaggttctc	420
cggccgcttg	ggtggagagg	ctattcggct	atgactgggc	acaacagaca	atcggctgct	480
ctgatgccgc	cgtgttccgg	ctgtcagcgc	aggggcgcgc	ggttcttttt	gtcaagaccg	540
acctgtccgg	tgccctgaat	gaactgcagg	acgaggcagc	gcggctatcg	tggttgacca	600
cgacggggcg	tccttgccga	gctgtgctcg	acgttgctac	tgaagcggga	agggactggc	660
tgctattggg	cgaagtgcgc	gggcaggatc	tcctgtcatc	tcaccttgct	cctgcccaga	720
aagtatccat	catggctgat	gcaatgcggc	ggctgcatac	gcttgatccg	gctacctgcc	780
cattcgacca	ccaagcgaaa	catcgcatcg	agcgagcacg	tactcggatg	gaagccgggc	840
ttgtcgatca	ggatgatctg	gacgaagagc	atcaggggct	cgcgccagcc	gaactgttcg	900
ccaggctcaa	ggcgcgcag	cccagcggcg	aggatctcgt	cgtgacctat	ggcgatgcct	960
gcttgccgaa	tatcatgggt	gaaaatggcg	gctttttctg	attcatcgac	tgtggccggc	1020
tgggtgtggc	ggaccgctat	caggacatag	cgttggctac	ccgtgatatt	gctgaagagc	1080
ttggcggcga	atgggctgac	cgttccctcg	tgctttacgg	tatcgccgct	cccgatccgc	1140
agcgcatcgc	cttctatcgc	cttcttgacg	agttcttctg	agtttaaaca	gaccacaacg	1200
gtttccctct	agcgggatca	attccgcccc	tctccctccc	ccccccctaa	cgttactggc	1260
cgaagccgct	tggaataagg	cgggtgtgcg	tttgtctata	tgttattttc	cacctatttg	1320
ccgtcttttg	gcaatgtgag	ggcccggaaa	cctggccctg	tcttcttgac	gagcatctct	1380
aggggtcttt	ccctctcgcg	caaaggaaatg	caaggctctgt	tgaatgtcgt	gaagggaagca	1440
gttctctctg	aagcttcttg	aagacaaaca	acgtctgtag	cgaccctttg	caggcagcgg	1500
aacccccccac	ctggcgacag	gtgcctctgc	ggccaaaagc	cacgtgtata	agatacacct	1560
gcaaaggcgg	cacaaccccc	gtgccacggt	gtgagttgga	tagttgtgga	aagagtcaaa	1620
tggtctctct	caagcgtatt	caacaagggg	ctgaaggatg	cccagaagg	acccatttgt	1680
atgggatctg	atctggggcc	tcgggtgcaca	tgctttacat	gtgttttagtc	gaggttaaaa	1740
aacgtctagg	ccccccgaac	cacgggggacg	tggttttcct	ttgaaaaaca	cgataataacc	1800
atggcgccct	ttacggccct	ctcccaacag	acgcgaggcc	tacttggctg	catcatcact	1860
agcctcacag	gcccgggacag	gaaccagggtc	gagggggagg	tccaagtgg	ctccaccgca	1920
acacaatctt	tcctggcgac	ctgcgtcaat	ggcgtgtgtt	ggactgtcta	tcattggtgcc	1980
ggctcaaaga	ccttggccgg	cccaaagggg	ccaatcacc	aatgtacac	caatgtggac	2040
caggacctcg	tcgggtggca	agcgcccccc	ggggcgcgct	ccttgacacc	atgcacctgc	2100
ggcagctcgg	acctttactt	ggtcacgagg	catgccgatg	tcattccggg	gcgcggcgcg	2160
ggcgacagca	gggggagcct	actctcccc	aggcccgtct	cctacttgaa	gggctcttcg	2220
ggcgggtccac	tgctctgccc	ctcggggcac	gctgtgggca	tctttcgggc	tgccgtgtgc	2280
acccgagggg	ttgcgaaggc	ggtggacttt	gtaccgctcg	agtctatgga	aaccactatg	2340
cggctccccg	tcttcacgga	caactcgtcc	cctccggccg	taccgcagac	attccagggt	2400
gcccattctac	acgccccctac	tggtagcggc	aagagcacta	aggtgcccgc	tgccgtatgca	2460
gcccagggtg	ataagggtgt	tgctctgaac	ccgtccgtcg	ccgccaccct	aggtttcggg	2520
gcgtatatgt	ctaaggcaca	tggtatcgac	cctaaccatca	gaaccgggg	aaggaccatc	2580
accacgggtg	cccccatcac	gtactccacc	tatggcaagt	ttcttgccga	cgggtggttg	2640
tctggggggc	cctatgacat	cataatatgt	gatgagtgc	actcaactga	ctcgaccact	2700
atcctgggca	tcggcacagt	cctggaccaa	gcggagacgg	ctggagcgcg	actcgtcgtg	2760
ctcgccaccg	ctacgcctcc	gggatcggtc	accgtgccac	atccaaacat	cgaggagggtg	2820
gctctgtcca	gcactggaga	aatccccctt	tatggcaaag	ccatccccat	cgagaccatc	2880
aagggggggg	ggcacctcat	tttctgccat	tccaagaaga	aatgtgatga	gctcgccgcg	2940
aagctgtccg	gcctcggact	caatgctgta	gcatattacc	ggggccttga	tgtatccgtc	3000
ataccaacta	gcggagacgt	cattgtcgta	gcaacggacg	ctctaattgac	gggctttacc	3060
ggcgatttcg	actcagtgat	cgactgcaat	acatgtgtca	cccagacagt	cgacttcagc	3120
ctggaccgga	ccttcaccat	tgagacgacg	accgtgccac	aagacgcggg	gtcacgctcg	3180
cagcggcgag	gcaggactgg	taggggcagg	atgggcattt	acaggtttgt	gactccagga	3240
gaacggccct	cgggcatggt	cgattcctcg	gttctgtgcg	agtgtatgta	cgcgggctgt	3300
gcttggtacg	agctcacgcc	cgcggagacc	tcagttaggt	tgccggctta	cctaaacaca	3360
ccagggttgc	ccgtctgcca	ggaccatctg	gagttctggg	agagcgtctt	tacagccctc	3420
accacatag	acgcccattt	cttgctccag	cctaagcagg	caggagacaa	ctccccctac	3480
ctggtagcat	accaggctac	ggtgtgcgcc	agggctcagg	ctccacctcc	atcgtggggc	3540
caaagtgtga	agtgtctcat	acggctaaag	cctacgctgc	acgggccaac	gcccctgctg	3600
tataggctgg	gagccggtca	aaacgagggt	actaccacac	accccataac	caaatacatc	3660
atggcatgca	tgctagctga	cctggagggtc	gtcacgagca	cctgggtgct	ggtaggcgga	3720
gtccctagcag	ctctggccgc	gtattgcctg	acaacaggca	gcgtgggtcat	tgtgggcagg	3780
atcatcttgt	ccggaaagcc	ggccatcatt	cccagcagg	aagtccttta	ccgggagttc	3840
gatgagatgg	aagagtgcgc	ctcacacctc	ccttacatcg	aacggggaat	gcagctcgcc	3900
gaacatttca	aacagaaggc	aatcgggttg	ctgcaaacag	ccaccaagca	agcggagggt	3960

gctgctcccg	cggtggaatc	caagtggcgg	accctcgaag	ccttctgggc	gaagcatatg	4020
tggaatttca	tcagcgggat	acaatattta	gcaggcttgt	ccactctgcc	tggcaacccc	4080
gcgatagcat	cactgatggc	attcacagcc	tctatcacca	gcccgtcac	cacccaacat	4140
accctcctgt	ttaacatcct	ggggggatgg	gtggccgccc	aacttgctcc	tcccagcgct	4200
gcttctggtt	tggtagggcg	cggaatcgct	ggagcgsgctg	ttggcagcat	agggccttgyy	4260
aaggtgcttg	tggaatattt	ggcagggttat	ggagcagggg	tggcagggcg	gctcgtggcc	4320
tttaagggtca	tgagcggcga	gatgccctcc	accgaggacc	tggttaacct	actccctgct	4380
atcctctccc	ctggcgccct	agtcgtcggg	gtcgtgtgcg	cagcgatact	gcgtcggcac	4440
gtgggcccag	gggagggggc	tgtgcagtgg	atgaaccggc	tgatagcggt	cgcttcgcgg	4500
ggtaaccacg	tctccccac	gcactatgtg	cctgagagcg	acgctgcagc	acgtgtcact	4560
cagatcctct	ctagtcttac	catcactcag	ctgctgaaga	ggcttcacca	gtggatcaac	4620
gaggactgct	ccacgcctag	ctccggctcg	tggctaagag	atgtttggga	ttggatatgc	4680
acggtgttga	ctgatttcaa	gacctggctc	cagtccaaag	tcctgccgcg	attgccggga	4740
gtcccccttct	tctcatgtca	acgtgggtac	aagggagtct	ggcggggcga	cggcatcatg	4800
caaaccacct	gcccattgtg	agcacagatc	accggacatg	tgaaaaacgg	ttccatgagg	4860
atcgtggggc	ctaggacctg	tagtaaacac	tggcatggaa	cattccccat	taacgcgtac	4920
accacggggc	cctgcacgcc	ctccccggcg	ccaaattatt	ctagggcgct	gtggcgggtg	4980
gctgctgagg	agtaacgtga	ggttacgcgg	gtgggggatt	tccactacgt	gacgggcatg	5040
accactgaga	acgtaaagtg	cccggtctcag	gttccggccc	ccgaattctt	cacagaagtg	5100
gatgggggtgc	ggttgcacag	gtacgctcca	gcgtgcaaac	ccctcctacg	ggaggaggtc	5160
acattccttg	tcggggtcaa	tcaatacctg	gttgggtcac	agctcccatg	cgagcccgaa	5220
ccggacgtag	cagtgtctac	ttccatgtct	accgacccct	cccacattac	ggcggagacg	5280
gctaagcgta	gggtggccag	gggatctccc	ccctccttgg	ccagctcatc	agctatccag	5340
ctgtctcgcg	cttccttgaa	ggcaacatgc	actaccctgc	atgactcccc	ggcagctgac	5400
ctcatcgagg	ccaacctcct	gtggcggcag	gagatgggcg	ggaacatcac	ccgcgtggag	5460
tcagaaaata	aggtagtaat	tttggagtct	ttcgagccgc	tccaagcggg	ggaggatgag	5520
aggggaagtat	ccgttccggc	ggagatcctg	cggaggtcca	ggaaattccc	tcgagcgatg	5580
cccatatggg	cactcccggg	ttacaaccct	ccactgttag	agtcctggaa	ggacccgga	5640
tacgtccctc	cagtgggtaca	cgggtgtcca	ttgccgcctg	ccaaggcccc	tcgggtacca	5700
cctccacgga	ggaagaggac	ggttgctcctg	tcagaatcta	ccgtgtcttc	tgccttggcg	5760
gagctcgcca	caaagacctt	ggcagctccc	gaatcgctcg	ccgtcgacag	cggcacggca	5820
acggcctctc	ctgggtgagga	cgtcgtctgc	tgctcgatgt	cctacacatg	gacaggcgcc	5880
ctgatcacgc	catgcgctgc	ggaggaaacc	aagctgccc	tcaatgcact	gagcaactct	5940
ttgctccgac	accacaactt	ggtctatgct	acaacatctc	gcagcgcaag	cctgcggcag	6000
aagaagggtca	cctttgacag	actgcaggtc	ctggacgacc	actaccggga	cgtgctcaag	6060
ggaatgaagg	cgaaggcgct	cacagttaag	ctgaacttcc	tatccgtgga	ggaagctcgt	6120
aagctgacgc	ccccacattc	ggccagatct	aaatttggct	atggggcaaa	ggacgtccgg	6180
aacctatcca	gcaaggccgt	taaccacatc	cgctccgtgt	ggaaggactt	gctggaagac	6240
actgagacac	caattgacac	caccatcatg	gcaaaaaatg	aggttttctg	cgtccaacca	6300
gagaaggggg	gcccgaagcc	agctcgctct	atcgtattcc	cagatttggg	ggttcgtgtg	6360
tgcgagaaaa	tggcccttta	cgatgtggtc	tcaccctccc	ctcaggccgt	gatgggctct	6420
tcatacggat	tccaatactc	tctggacag	cgggtcgagt	tcctggtgaa	tgcttgga	6480
gcgaagaaat	gccctatggg	cttcgcata	gacaccgcgt	gttttgactc	aacgggtcact	6540
gagaatgaca	tccgtgttga	ggagtcaatc	taccaatgtt	gtgacttggc	ccccgaagcc	6600
agacaggcca	taaggctcgt	cacagagcgg	ctttacatcg	ggggccccc	gactaattct	6660
aaagggcaga	actgcggcta	tcgcgggtgc	cgcgcgagcg	gtgtactgac	gaccagctgc	6720
ggtaataacc	tcacatgtta	cttgaaggcc	gctgcggcct	gtcgagctgc	ggaagctccag	6780
gactgcacga	tgctcgtatg	cggagacgac	cttgtcggtta	tctgtgaaag	cgcggggacc	6840
caagaggacg	aggcgagcct	acgggccttc	acggaggcta	tgactagata	ctctgcccc	6900
cctggggacc	cgcccaaacc	agaatacgac	ttggagtgtga	taacatcatg	ctcctccaat	6960
gtgtcagtcg	cgcacgatgc	atctggcaaa	aggggtgtact	atctcaccgc	tgaccccacc	7020
accccccttg	cgcgggctgc	gtgggagaca	gctagacaca	ctccagtcaa	ttcctggcta	7080
ggcaacatca	tcattgtatgc	gccaccttgc	tgggcaagga	tgatcctgat	gactcatttc	7140
ttctccatcc	ttctagctca	ggaacaactt	gaaaaagccc	tagattgtca	gatctacggg	7200
gcctgttact	ccattgagcc	acttgacctc	cctcagatca	ttcaacgact	ccatggcctt	7260
agcgcatatt	cactccatag	ttactctcca	ggtgagatca	ataggggtgg	ttcatgcctc	7320
aggaaacttg	gggtaccgcc	cttgcgagtc	tggagacatc	ggggccagaag	tgtccgcgct	7380
aggctactgt	cccagggggg	gagggctgcc	acttgtggca	agtacctctt	caactgggca	7440
gtaagggaca	agctcaaaact	cactccaatc	ccggctgcgt	cccagttgga	ttatccagc	7500
tggttcgttg	ctgggttacag	cggggggagac	atatatcaca	gcctgtctcg	tgcccggacc	7560
cgctgggttca	tgtggtgcct	actcctactt	tctgtagggg	taggcatcta	tctactcccc	7620
aaccgatgaa	cgggggacct	aacactccag	gccaataggg	catcctgttt	ttttcccttt	7680
tttttttctt	tttttttttt	tttttttttt	tttttttttt	ttttctcttt	ttttttcttc	7740
tttttttctt	tttttttctt	ttgttggttc	catcttagcc	ctagtacggt	ctagtctgga	7800
aaggctcgtg	agccgcttga	ctgcagagag	tgctgatact	ggcctctctg	cagatcaagt	7860
actcctgcag	gcgcgccact	agtgggaata	cgcgggggat	gccgcgtttt	agcatattga	7920

cgacccaatt	ctcatgtttg	acagctttatc	atcgataagc	tttaatgcgg	tagtttatca	7980
cagttaaatt	gctaacgcag	tcaggcaccg	tgtatgaaat	ctaacaatgc	gctcatcgctc	8040
atcctcggca	ccgtcaccct	ggatgctgta	ggcataggct	tggttatgcc	ggtactgccg	8100
ggcctcttgc	gggatatcgt	ccattccgcac	agcatcgcca	gtcactatgg	cgtgctgcta	8160
gcgtatatg	cgttgatgca	atttctatgc	gcaccgcttc	tcggagcaat	gtccgaccgc	8220
tttggccgcc	gcccagtcct	gctcgtctcg	ctacttggag	ccactatcga	ctacgcgatc	8280
atggcgacca	caccgcctct	gtggatcctc	tacgcccggac	gcacgtggc	cggcatcacc	8340
ggcgccacag	gtgcggttgc	tggcgccctat	atcgccgaca	tcaccgatgg	ggaagatcgg	8400
gctcgccact	tcggggtcat	gagcgtttgt	tccggcgtgg	gtatgggtggc	aggccccgtg	8460
gccgggggac	tggtggggcg	catctccttg	catgcaccat	tccttgccgc	ggcgggtgctc	8520
aacggcctca	acctactact	gggctgcttc	ctaattgcag	agtcgcataa	gggagagcgt	8580
cgacgatgc	ccttgagagc	cttcaaccca	gtcagctcct	tccgggtgggc	gcggggcatg	8640
actatcgctg	ccgcacttat	gactgtcttc	tttatcatgc	aactcgtagg	acaggtgccg	8700
gcagcgctct	gggtcatttt	cggcgaggac	cgctttcgct	ggagcgcgac	gatgatcggc	8760
ctgtcgcttg	cggtatctcg	aatcttgca	gccctcgctc	aagccttcgt	cactggtccc	8820
gccaccaaac	gtttcggcga	gaagcaggcc	attatcgccg	gcattggcggc	cgacgcgctg	8880
ggctacgtct	tgctggcggt	cgcgacgcga	ggctggatgg	ccttccccat	tatgattcct	8940
ctcgcttccg	gcggcatcgg	gatgcccgcg	ttgcaggcca	tgctgtccag	gcaggtagat	9000
gacgaccatc	agggacagct	tcaaggatcg	ctcgcggtct	ttaccagcct	aacttcgatc	9060
actggaccgc	tgatcgtcac	ggcgatttat	gccgcctcgg	cgagcacatg	gaacgggttg	9120
gcattggattg	taggcgcccgc	cctatacctt	gtctgcctcc	ccgcgttgcg	tcgcgggtgca	9180
tggagccggg	ccacctcgac	ctgaatggaa	gccggcggga	cctcgctaac	ggattcacca	9240
ctccaagaat	tggagccaat	caattcttgc	ggagaactgt	gaatgcgcaa	accaaccctt	9300
ggcagaacat	atccatcgcg	tccgccatct	ccagcagccg	cacgcggcgc	atctcgggca	9360
gcgttgggtc	ctggccacgg	gtgcgcgatga	tcgtgtcctc	gtcgttgagg	acccggctag	9420
gctggcgggg	ttgccttact	ggtagcaga	atgaatcacc	gatacgcgag	cgaacgtgaa	9480
gcgactgctg	ctgcaaaacg	tctgcgacct	gagcaacaac	atgaatggtc	ttcgggtttcc	9540
gtgtttctga	aagtctggaa	acgcggaagt	cagcgccctg	caccattatg	ttccggatct	9600
gcctcgcagg	atgctgctgg	ctaccctgtg	gaacacctac	atctgtatta	acgaagcgtc	9660
ggcattgacc	ctgagtgaat	tttctctggt	cccgcgcgat	ccataccgcc	agttgtttac	9720
cctcacaacg	ttccagtaac	cgggcatgtt	catcatcagt	aaccgcgtatc	gtgagcatcc	9780
tctctcgttt	catcggtatc	attaccccca	tgaacagaaa	ttccccctta	cacggaggca	9840
tcaagtgcac	aaacaggaaa	aaaccgccct	taacatggcc	cgcttttatca	gaagccagac	9900
attaacgctt	ctggagaaac	tcaacgagct	ggacgcggat	gaacaggcag	acatctgtga	9960
atcgcttcac	gaccacgctg	atgagcttta	ccgcagctgc	ctcgcgcggt	tcggtgatga	10020
cgggtgaaaac	ctctgacaca	tgcagctccc	ggagacggtc	acagcttgtc	tgtaagcgga	10080
tgccggggagc	agacaagccc	gtcagggcgc	gtcagcgggt	gttggcgggt	gtcggggcgc	10140
agccatgacc	cagtcacgta	gcgatagcgg	agtgtatact	ggcttaacta	tgccggcatca	10200
gagcagattg	tactgagagt	gcaccatagt	cgggtgtgaaa	taccgcacag	atgcgtaagg	10260
agaaaatacc	gcatcaggcg	ctcttcgcgt	tcctcgctca	ctgactcgct	gcgctcggtc	10320
gttcggctgc	ggcgagcggg	atcagctcac	tcaaaggcgg	taatacgggt	atccacagaa	10380
tcaggggata	acgcaggaaa	gaacatgtga	gcaaaaggcc	agcaaaaggc	caggaaccgt	10440
aaaaaggccg	cgttgctggc	gtttttccat	aggctccgcc	cccctgacga	gcatacaaaa	10500
aatcgacgct	caagtcaagag	gtggcgaaac	ccgacaggac	tataaagata	ccaggcgttt	10560
ccccctggaa	gctccctcgt	gcgctctcct	gttccgaccc	tgccgcttac	cggataacctg	10620
tccgcctttc	tcccttcggg	aagcgtggcg	ctttctcata	gctcacgctg	taggtatctc	10680
agttcgggtg	aggtcggttcg	ctccaagctg	ggctgtgtgc	acgaaccccc	cgttcagccc	10740
gaccgctgcg	ccttatccgg	taactatcgt	cttgagtcca	acccggtaag	acacgactta	10800
tcgccactgg	cagcagccac	tggtaacagg	attagcagag	cgaggtatgt	aggcgggtgt	10860
acagagttct	tgaagtgggtg	gcctaactac	ggctacacta	gaaggacagt	atgttggtatc	10920
tgcgctctgc	tgaagccagt	taccttcgga	aaaagagttg	gtagctcttg	atccggcaaaa	10980
caaaccacgg	ctggtagcgg	tggttttttt	gtttgcaagc	agcagattac	gcgcagaaaa	11040
aaaggatctc	aagaagatcc	tttgatcttt	tctacggggg	ctgacgctca	gtggaacgaa	11100
aactcacggt	aagggttttt	ggtcatgaga	ttatcaaaaa	ggatcttcac	ctagatcctt	11160
ttctagataa	tacgactcac	tata				11184

<210> 14

<211> 11184

<212> DNA

<213> Artificial Sequence

<220>

<223> Plasmid

<400> 14

gccagccccc	gattgggggg	gacactccac	catagatcac	tccccgtgta	ggaactactg	60
tcttcacgca	gaaagcgtct	agccatggcg	ttagtatgag	tgtcgtgcag	cctccaggac	120
ccccctccc	gggagagcca	tagtgggtctg	cggaaaccggt	gagtaacaccg	gaattgccag	180
gacgaccggg	tcccttcttg	gataaagcgg	ctcaatgcct	ggagatttgg	gctgcccccc	240
gcgagactgc	tagccgagta	gtgttgggtc	gcgaaaggcc	ttgtgggtact	gcctgatagg	300
gtgcttgcca	gtgccccggg	aggtctcgta	gaccgtgcac	catgagcacg	aatcctaacc	360
ctcaaagaaa	aaccaaaggg	cgcgccatga	ttgaacaaga	tggattgcac	gcagggttctc	420
cggccgcttg	ggtggagagg	ctattcggct	atgactgggc	acaacagaca	atcggctgct	480
ctgatgccgc	cgtgttccgg	ctgtcagcgc	aggggcgccc	ggttcttttt	gtcaagaccg	540
acctgtccgg	tgccctgaat	gaactgcagg	acgaggcagc	gcggctatcg	tggctggcca	600
cgacgggcgt	tcccttgcca	gctgtgctcg	acgttgtcac	tgaagcggga	agggactggc	660
tgctattggg	cgaagtgccg	gggcaggatc	tcctgtcacc	tcaccttgct	cctgcccaga	720
aagtatccat	catggctgat	gcaatgcggc	ggctgcatac	gcttgatccg	gctacctgcc	780
cattcgacca	ccaagcgaaa	catcgcatcg	agcgagcacg	tactcggatg	gaagccggtc	840
ttgtcgatca	ggatgatctg	gacgaagagc	atcaggggct	cgcgccagcc	gaactgttctg	900
ccaggctcaa	ggcgcgcatg	cccgcggcgc	aggatctctg	cgtgacccat	ggcgatgcct	960
gcttgccgaa	tatcatgggtg	gaaaatggcc	gcttttctgg	attcatcgac	tgtggccggc	1020
tgggtgtggc	ggaccgctat	caggacatag	cgttggctac	ccgtgatatt	gctgaagagc	1080
ttggcggcga	atgggctgac	cgcttccctg	tgctttacgg	tatcgccgct	cccgatctgc	1140
agcgcatcgc	cttctatcgc	cttcttgacg	agttcttctg	agtttaaaaca	gaccacaacg	1200
gtttccctct	agcgggatca	attccgcccc	tctccctccc	ccccccctaa	cgttactggc	1260
cgaagccgct	tggaataagg	cgggtgtgcg	tttgtctata	tgttattttc	caccatattg	1320
ccgtcttttg	gcaatgtgag	ggcccggaaa	cttgccctg	tcttcttgac	gagcatctct	1380
aggggtcttt	ccctctcgc	caaaggaatg	caaggtctgt	tgaatgtcgt	gaaggaagca	1440
gttctctctg	aagcttcttg	aagacaaaaca	acgtctgtag	cgaccctttg	caggcagcgg	1500
aacccccac	ctggcgacag	gtgcctctgc	ggccaaaagc	cacgtgtata	agatacacct	1560
gcaaaggcgg	cacaacccca	gtgccacgtt	gtgagttgga	tagttgtgga	aagagtcaaa	1620
tggtctctct	caagcgtatt	caacaagggg	ctgaaggatg	cccagaagg	acccatttgt	1680
atgggatctg	atctggggcc	tcgggtgcaca	tgctttacat	gtgttttagtc	gaggttaaaa	1740
aacgtctagg	ccccccgaac	cacggggacg	tggttttctc	ttgaaaaaca	cgataataacc	1800
atggcgccct	ttacggccct	ctcccaacag	acgcgaggcc	tacttggctg	catcatcact	1860
agcctcacag	gcccgggacag	gaaccaggct	gagggggagg	tccaagtgg	ctccaccgca	1920
acacaactct	tccctggcgac	ctgctgcaat	ggcgtgtggt	ggactgtcta	tcatggtgcc	1980
ggctcaaaga	ccttggccgg	cccaaagggc	ccaatcaccc	aaatgtacac	caatgtggag	2040
caggacctcg	tcggctggca	agcgcccccc	ggggcgcggt	ccttgacacc	atgcacttgc	2100
ggcagcgcg	acctttactt	ggtcacgagg	catgccgatg	tcattccgg	gcgcggcg	2160
ggcgacagca	gggggagcct	actctcccc	aggcccgttt	cctacttgaa	gggctcttcg	2220
ggcggctccac	tgtcttgccc	ctcggggcac	gctgtgggca	tctttcgggc	tgccgtgtgc	2280
acccgagggg	ttgcgaaggc	ggtggacttt	gtaccgcgtc	agtctatggg	aaccactatg	2340
cggctcccg	cttccacgga	caactcgtcc	ctccggccg	taccgcagac	attcgaagtg	2400
gcccattctac	acgcccctac	tggtagcggc	aagagcacta	aggtgccggc	tgcgatgca	2460
gcccagggt	ataaggtgct	tgtcctgaac	ccgtccgtcg	ccgccaccct	aggtttcggg	2520
gcgtatatgt	ctaaggcaca	tggtatcgac	cctaacatca	gaaccgggg	aaggaccatc	2580
accacgggtg	ccccatcac	gtactccacc	tatggcaagt	ttcttgccga	cgggtggttg	2640
tctggggg	ctatgacat	cataatatgt	gatgagtgc	actcaactga	ctcgaccact	2700
atcctgggca	tcggcacagt	cctggaccaa	gcggagacgg	ctggagcgcg	actcgtctg	2760
ctcgccaccg	ctacgcctcc	gggatcggtc	accgtgccac	atccaaacat	cgaggagggtg	2820
gctctgtcca	gcactggaga	aatccccctt	tatggcaaag	ccatccccat	cgagaccatc	2880
aaggggggga	ggcacctcat	tttctgccat	tccaagaaga	aatgtgatga	gctcgccg	2940
aagctgtccg	gcctcggact	caatgctgta	gcatattacc	ggggccttga	tgtatccgtc	3000
ataccaacta	gcggagacgt	cattgtcgta	gcaacgggac	ctctaagac	gggctttacc	3060
ggcgatttgc	actcagtgat	cgactgcaat	acatgtgtca	cccagacagt	cgacttcagc	3120
ctggaccgca	ccttcaccat	tgagacgacg	accgtgccac	aagacgcgg	gtcacgctcg	3180
cagcggcgag	gcaggactgg	taggggcagg	atgggcattt	acaggtttgt	gactccagga	3240
gaacggccct	cgggcatggt	cgattcctcg	gttctgtg	agtgtatga	cgccgggctgt	3300
gcttggttac	agctcacgcc	cgccgagacc	tcagttagg	tgccgggctta	cctaaacaca	3360
ccagggttgc	ccgtctgcca	ggaccatctg	gagttctggg	agagcgtctt	tacagccctc	3420
accacatag	acgcccattt	cttgtcccag	actaagcagg	caggagacaa	cttcccctac	3480
ctggttagcat	accaggctac	ggtgtgcgcc	agggctcagg	ctccacctcc	atcgtggggac	3540
caaagtgtga	agtgtctcat	acggctaaag	cctacgctgc	acgggccaac	gcccctgctg	3600
tataggctgg	gagccgttca	aaacgaggtt	actaccacac	accccataac	caaatacatc	3660
atggcatgca	tgctacgtga	cctggaggtc	gtcacgagca	cctgggtgct	ggtggcgga	3720
gtcctagcag	ctctggccgc	gtattgcctg	acaacaggca	gcgtgggtcat	tgtgggcagg	3780
atcatcttgt	ccggaaagcc	ggccatcatt	cccagacagg	aagtctttta	ccgggaggtc	3840
gatgagatgg	aagagtgcgc	ctcacacctc	ccttacatcg	aacggggaat	gcagctcgcc	3900

gaacattttca	aacagaaggc	aatcgggttg	ctgcaaacag	ccaccaagca	agcggaggct	3960
gctgctcccc	cgggtggaatc	caagtggcgg	accctcgaag	ccttctgggc	gaagcatatg	4020
tgggaattttca	tcagcgggat	acaatatatta	gcaggcttgt	ccactctgcc	tggcaacccc	4080
gcgatagcat	cactgatggc	attcacagcc	tctatcacca	gcccgcctac	cacccaacat	4140
accctcctgt	ttaacatcct	ggggggatgg	gtggcggccc	acttctgctcc	tcccagcgct	4200
gcttctgctt	tcgtaggcgc	cggcatcgct	ggagcggctg	ttggcagcat	aggccttggg	4260
aagggtgcttg	tggatatttt	ggcaggttat	ggagcagggg	tggcaggcgc	gctcgtggcc	4320
tttaaggtca	tgagcggcga	gatgccctcc	accgaggacc	tggttaacct	actccctgct	4380
atcctctccc	ctggcgccct	agtcgtcggg	gtcgtgtgcg	cagcgatact	gcgtcggcac	4440
gtgggcccag	gggagggggc	tgtgcagtgg	atgaaccggc	tgatagcggt	cgcttcgcgg	4500
ggtaaccacg	tctccccac	gcactatgtg	cctgagagcg	acgctgcagc	acgtgtcact	4560
cagatcctct	ctagtcttac	catcactcag	ctgctgaaga	ggcttcacca	gtggatcaac	4620
gaggactgct	ccacgccatg	ctccggctcg	tggctaagag	atgtttggga	ttggatatgc	4680
acgggtgttg	ctgattttcaa	gacctggctc	cagttccaagc	tcctgccgcg	attgccggga	4740
gtcccccttct	tctcatgtca	acgtgggtac	aaggagatct	ggcggggcga	cggcatcatg	4800
caaaccacct	gcccattgtg	agcacagatc	accggacatg	tgaaaaacgg	ttccatgagg	4860
atcgtggggc	ctaggacctg	tagtaacacg	tggcatggaa	cattccccat	taacgcgtac	4920
accacggggc	cctgcacggc	ctccccggcg	ccaaattatt	ctagggcgct	gtggcgggtg	4980
gctgctgagg	agtaacgtga	ggttacgcgg	gtgggggatt	tccactacgt	gacgggcgtg	5040
accactgaca	acgtaaagtg	cccgtgtcag	gttccggccc	ccgaattctt	cacagaagtg	5100
gatgggggtgc	ggttgccacag	gtacgctcca	gcgtgcaaac	ccctcctacg	ggaggagggtc	5160
acattcctgg	tcgggctcaa	tcaataacctg	gttgggtcac	agctcccatg	cgagcccgaa	5220
cggagcgtag	cagtgtctac	ttccatgtct	accgacccct	cccacattac	ggcggagacg	5280
gctaagcgta	gggtggccag	gggatctccc	ccctccttgg	ccagctcatc	ggcgtccag	5340
ctgtctgctg	cttcccttgaa	ggcaacatgc	actacccgtc	atgactcccc	ggacgctgac	5400
ctcatcgagg	ccaacctcct	gtggcggcag	gagatgggcg	ggaacatcac	ccgcgtggag	5460
tcagaaaata	aggtagtaat	tttggagctc	ttcgagccgc	tccaagcggg	ggaggatgag	5520
agggaagtat	ccgttcgggc	ggagatcctg	cggaggtcca	ggaaattccc	tcgagcgatg	5580
cccataatgg	cactcccgga	ttacaacctc	ccactgttag	agtccctggaa	ggacccggac	5640
tacgtccctc	cagtgggtaca	cgggtgtcca	ttgccgcctg	ccaaggcccc	tccgggtacca	5700
cctccacgga	ggaagaggac	ggttgtcctg	tcagaatcta	ccgtgtcttc	tgccctggcg	5760
gagctcgcca	caaagacctt	cggcagctcc	gaatcgtcgg	ccgtcgacag	cggcacggca	5820
acggcctctc	ctggtgagga	cgctcgtctg	tgctcgatgt	cctacacatg	gacaggcgcc	5880
ctgatcacgc	catgcgctgc	ggaggaaacc	aagctgcccc	tcaatgcact	gagcaactct	5940
ttgtctcgag	accacaactt	ggtctatgtc	acaacatctc	gcagcgcaag	cctgcggcag	6000
aagaaggtca	cctttgacag	actgcaggtc	ctggacgacc	actaccggga	cggtgtcaag	6060
gagatgaagg	cgaaggcgct	cacagttaag	gctaaacttc	tatccgtgga	ggaagcctgt	6120
aagctgacgc	ccccacatct	ggccagatct	aaatttggct	atggggcaaa	ggacgtccgg	6180
aacctatcca	gcaaggccgt	taaccacatc	cgctccgtgt	ggaaggactt	gctggaagac	6240
actgagacac	caattgacac	caccatcatg	gcaaaaaaat	aggttttctg	cgtccaacca	6300
gagaaggggg	cgcgcaagcc	agctcgctct	atcgtattcc	cagatttggg	gggtcgtgtg	6360
tgcgagaaaa	tggcccttta	cgatgtggtc	tccaccctcc	ctcaggccgt	gatgggctct	6420
tcatacgatg	tccaatactc	tcctggacag	cgggtcgagt	tcctgggtgaa	tgccctggaaa	6480
gcgaagaaat	gccctatggg	cttcgcatac	gacacccgct	gttttgactc	aacgggtcact	6540
gagaatgaca	tcctgtgttg	ggagtcaatc	taccaatgtt	gtgacttggc	ccccgaagcc	6600
agacaggcca	taaggtcgct	cacagagcgg	ctttacatcg	ggggccccct	gactaattct	6660
aaagggcaga	actgcggcta	tcgcgggtgc	cgcgcgagcg	gtgtactgac	gaccagctgc	6720
ggtaataccc	tcacatgtta	cttgaaggcc	gctgcggcct	gtcgagctgc	gaagctccag	6780
gactgcacga	tgctcgtatg	cggagacgac	cttgtcgta	tctgtgaaag	cgcggggacc	6840
caagaggacg	aggcgagcct	acgggccttc	acggaggcta	tgactagata	ctctgcccc	6900
cctggggacc	cgcccaaacc	agaatacgac	ttggagtga	taacatcatg	ctcctccaat	6960
gtgtcagtcg	cgcacgatgc	atctggcaaa	agggtgtact	atctcaccgg	tgaccaccac	7020
accccccttg	cgcgggctgc	gtgggagaca	gctagacaca	ctccagtcaa	ttcctggcta	7080
ggcaacatca	tcatgtatgc	gcccaccttg	tgggcaagga	tgatcctgat	gactcatttc	7140
ttctccatcc	ttctagctca	ggaacaactt	gaaaaagccc	tagattgtca	gatctacggg	7200
gcctgttact	ccattgagcc	acttgacctc	cctcagatca	ttcaacgact	ccatggcctt	7260
agcgcatttt	cactccatag	ttactctcca	ggtgagatca	ataggggtggc	ttcatgcctc	7320
aggaaacttg	gggtaccgcc	cttgcgagtc	tggagacatc	gggccagaag	tgctcgcgct	7380
aggctactgt	cccagggggg	gagggtgcc	acttgtggca	agtacctctt	caactgggca	7440
gtaaggacca	agctcaaact	cactccaatc	ccggctgcgt	cccagttgga	tttatccagc	7500
tggttcggtg	ctggttacag	cgggggagac	atatatcaca	gcctgtctcg	tgcccagacc	7560
cgctgggtca	tgtggtgcct	actcctactt	tctgtagggg	taggcatcta	tctactcccc	7620
aaccgatgaa	cggggaccta	aacactccag	gccaataggc	catcctgttt	ttttcccttt	7680
ttttttttct	tttttttttt	tttttttttt	tttttttttt	ttttctcctt	ttttctcctc	7740
tttttttcc	tttctttcct	ttggtggctc	catcttagcc	ctagtcacgg	ctagctgtga	7800
aaggctccgtg	agccgcttga	ctgcagagag	tgctgatact	ggcctctctg	cagatcaagt	7860

actcctgcag	gcgcgccact	agtgggaata	cgcggggtat	gccgcgtttt	agcatattga	7920
cgacccaatt	ctcatgtttg	acagcttatc	atcgataagc	tttaatgcgg	tagtttatca	7980
cagttaaatt	gctaacgcag	tcaggcacccg	tgtatgaaat	ctaacaatgc	gctcatcgtc	8040
atcctcggca	ccgtcaccct	ggatgctgta	ggcataggct	tggttatgcc	ggtagtgcg	8100
ggcctcttgc	gggatatcgt	ccattccgac	agcatcgca	gtcactatgg	cgtgctgcta	8160
gcgctatatg	cgttgatgca	atctctatgc	gcacccgctc	tcggagcact	gtccgaccgc	8220
tttgcccgcc	gcccagtcct	gctcgcttcg	ctacttggag	ccactatcga	ctacgcgac	8280
atggcgacca	caccgcctct	gtggatcctc	tacgccggac	gcacgtggc	cggcatcacc	8340
ggcgccacag	gtgcggttgc	tggcgccctat	atcgccgaca	tcaccgatgg	ggaagatcgg	8400
gctcgccact	tcgggctcat	gagcgcttgt	ttcggcgtgg	gtatgggtgg	aggccccgtg	8460
gccgggggac	tgttggggcg	catctccttg	catgcaccat	tccttgccgc	ggcggtgctc	8520
aacggcctca	acctactact	gggctgcttc	ctaattgcagg	agtcgcataa	gggagagcgt	8580
cgaccgatgc	ccttgagagc	cttcaaccca	gtcagctcct	tcgggtgggc	gcggggcatg	8640
actatcgctc	ccgcacttat	gactgtcttc	tttatcatgc	aactcgtagg	acaggtgccg	8700
gcagcgctct	gggtcatttt	cggcgaggac	cgctttcgct	ggagcgcgac	gatgatcggc	8760
ctgtcgcttg	cggtatctcg	aatcttgcac	gccctcgctc	aagccttcgt	cactggtccc	8820
gccaccaaac	gtttcgggca	gaagcaggcc	attatcgccg	gcattggcgg	cgacgcgctg	8880
ggctacgtct	tgtctggcgt	cgcgacgcga	ggctggatgg	ccttccccat	tatgattcct	8940
ctcgcttcgg	gcggcatcgg	gatgcccgcg	ttgcaggcca	tgtgtccag	gcaggtagat	9000
gacgaccatc	agggacagct	tcaaggatcg	ctcgcgctc	ttaccagcct	aacttcgatc	9060
actggaccgc	tgatcgctac	ggcgatttat	gccgcctcgg	cgagcacatg	gaacgggttg	9120
gcatggattg	taggcgcgcg	cctatacctt	gtctgcctcc	ccgcgttgcg	tcgcggtgca	9180
tggagccggg	ccacctcgac	ctgaatggaa	gccggcgcca	cctcgctaac	ggattcacca	9240
ctccaagaat	tggagccaat	caattcttgc	ggagaactgt	gaatgcgcaa	accaaccctt	9300
ggcagaacat	atccatcgcg	tccgccatct	ccagcagccg	cacgcggcgc	atctcgggca	9360
gcgttgggtc	ctggccacgg	gtgcgcatga	tcgtgtcctc	gtcgttgagg	acccggctag	9420
gctggcgggg	ttgccttact	ggtttagcaga	atgaatcacc	gatacgcgag	cgaacgtgaa	9480
gcgactgctg	ctgcaaaacg	tctgcgacct	gagcaacaac	atgaatggtc	ttcggtttcc	9540
gtgtttcgta	aagctctggaa	acgcggaagt	cagcgccctg	caccattatg	ttccggtatg	9600
gcatcgcagg	atgtgtgctg	ctaccctgtg	gaacacctac	atctgtatta	acgaagcgtc	9660
ggcattgacc	ctgagtgatt	tttctctggt	cccgcgcgat	ccataccgcc	agttgtttac	9720
cctcacaacg	ttccagtaac	cgggcatggt	catcatcagt	aaccgcgtatc	gtgagcatcc	9780
tctctcgttt	catcggtatc	attaccccca	tgaacagaaa	ttccccctta	cacggaggca	9840
tcaagtgacc	aaacaggaaa	aaaccgccct	taacatggcc	cgcttttatca	gaagccagac	9900
attaacgctt	ctggagaaac	tcaacgagct	ggacgcggat	gaacaggcag	acatctgtga	9960
atcgcttcac	gaccacgctg	atgagcttta	ccgcagctgc	ctcgcgcggt	tcgggtgatga	10020
cggtgaaaac	ctctgacaca	tgcagctccc	ggagacggtc	acagcttgct	tgtaaagcga	10080
tgcggggagc	agacaagccc	gtcaggggcg	gtcagcgggt	gttggcgggt	gtcggggcgc	10140
agccatgacc	cagtcacgta	gcgatagcgg	agtgtatact	ggcttaacta	tgcggcatca	10200
gagcagagtg	tactgagagt	gcaccatatg	cgggtgtgaa	taccgcacag	atgcgtaagg	10260
agaaaatacc	gcatacggcg	ctcttcgcgt	tcctcgctca	ctgactcgct	gcgctcggtc	10320
gttcggctgc	ggcgagcggt	atcagctcac	tcaaaggcgg	taatacgggt	atccacagaa	10380
tcaggggata	acgcaggaaa	gaacatgtga	gcaaaaggcc	agcaaaaggc	caggaaaccgt	10440
aaaaaggccg	cgttgctggc	gtttttccat	aggctccgcc	cccctgacga	gcatacaaaa	10500
aatcgacgct	caagtcagag	gtggcgaaac	ccgacaggac	tataaagata	ccaggcggtt	10560
ccccctggaa	gctccctcgt	gcgctctcct	gttccgaccc	tgccgcttac	cggatcacctg	10620
tccgccttcc	tcccttcggg	aagcgtggcg	ctttctcata	gtcacgctg	taggtatctc	10680
agttcggtgt	aggtcggtcg	ctccaagctg	ggctgtgtgc	acgaaccccc	cgttcagccc	10740
gaccgctgcg	ccttatccgg	taactatcgt	cttgagtcca	acccggtaag	acacgactta	10800
tcgccactgg	cagcagccac	tggtaacagg	attagcagag	cgaggtatgt	aggcggtgct	10860
acagagttct	tgaagtgggtg	gcctaactac	ggctacacta	gaaggacagt	atttggtatc	10920
tgcgctctgc	tgaagccagt	taccttcgga	aaaagagttg	gtagctcttg	atccggcaaa	10980
caaaccaccg	ctggtagcgg	tgggtttttt	gtttgcaagc	agcagattac	gcgcagaaaa	11040
aaaggatctc	aagaagatcc	tttgatcttt	tctacggggg	ctgacgctca	gtggaacgaa	11100
aactcacgtt	aagggatttt	ggatcatgaga	ttatcaaaaa	ggatcttcac	ctagatcctt	11160
ttctagataa	tacgactcac	tata				11184

<210> 15

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer

<400> 15
agtatcgtgg tagagagctg c 21

<210> 16
<211> 36
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 16
taatacgact cactataggg atgtggctgg agatgc 36